



Lynn Valley Town Centre

PUBLIC REALM AND DESIGN GUIDELINES

Ramsay Worden Architects
PFS Studio
June 1, 2015

TABLE OF CONTENTS

| | | |
|------------|---|-----------|
| 1.0 | OVERALL DESIGN PRINCIPLES AND OBJECTIVES | 6 |
| 1.0 | Vision for the Lynn Valley Town Centre | 7 |
| 1.1 | Design Principles and Purpose | 7 |
| 1.2 | Policy Context | 8 |
| 1.3 | Planning Framework | 9 |
| 1.4 | Other Relevant Documents | 9 |
| 1.5 | How to use this Document | 9 |
| 2.0 | OPEN SPACE GUIDELINES | 10 |
| 2.0 | Open Space Guidelines | 11 |
| 2.1 | Pedestrian/Cycle Pathways | 12 |
| 2.1.1 | Town Centre Pedestrian Pathways | 12 |
| 2.1.2 | Town Centre Pedestrian/Cycle Greenway | 13 |
| 2.1.3 | Town Centre Core Pedestrian/Cycle Greenway | 14 |
| 2.1.5 | Town Centre Core Pedestrian Mews | 15 |
| 2.1.6 | Green Lane | 16 |
| 2.2 | Public Plazas | 17 |
| 2.3 | Neighbourhood Park | 18 |
| 2.3.1 | Park Planning - General | 18 |
| 2.3.2 | Preliminary Neighbourhood Park Guidelines | 18 |
| 2.3.3 | Preliminary Play Programming | 19 |
| 3.0 | SPECIFIC STREET DESIGN GUIDELINES | 20 |
| 3.0 | Specific Street Guidelines | 21 |
| 3.1 | High Street (Valley Centre Avenue) | 22 |
| 3.1.1 | High Street Planting | 22 |
| 3.2 | Library Lane | 24 |
| 3.2.1 | Library Lane Planting | 24 |
| 3.3 | East 27th Street | 26 |
| 3.4 | New Local Streets | 27 |
| 3.4.1 | New Streets Planting | 28 |
| 3.5 | Service Passage | 29 |
| 4.0 | GENERAL STREET DESIGN GUIDELINES | 30 |
| 4.0 | General Street Design Guidelines | 31 |
| 4.1 | Street Design Elements | 31 |
| 4.1.1 | Cycle Lanes and Paths | 32 |
| 4.1.2 | Parking Pockets including Furniture and Planting Zone | 33 |
| 4.1.3 | Sidewalks | 34 |
| i. | Pedestrian Zone | 34 |
| ii. | Town Centre Core Streets | 34 |
| iii. | Town Centre Connector Streets | 34 |
| iii. | New Local Streets | 34 |
| 4.1.4 | Accessibility | 35 |

| | | |
|------------|--|-----------|
| 4.1.5 | Pedestrian Crossings | 35 |
| i. | Pedestrian Priority | 35 |
| ii. | Special Intersections and Mid-Block Crosswalks | 35 |
| iii. | Accessibility | 35 |
| iv. | Lighting | 35 |
| 4.1.6 | Street Furniture | 36 |
| i. | Benches | 36 |
| ii. | Recycling Containers | 36 |
| iii. | Bicycle Racks | 36 |
| iv. | Newspaper Dispensers and Mailboxes | 37 |
| v. | Water Fountains | 37 |
| vi. | Utility Covers | 37 |
| vii. | Fire Hydrants | 37 |
| 4.1.7 | Transit Shelters | 37 |
| 4.1.8 | Public Art | 38 |
| 4.1.9 | Gateways | 39 |
| 4.1.10 | Wayfinding | 40 |
| 4.1.11 | Signage | 40 |
| 4.1.12 | Street Lighting | 41 |
| i. | Street Lighting Types and Details | 41 |
| ii. | Light Distribution | 41 |
| 4.2 | Rain and Stormwater Management | 42 |
| 4.3 | Street Tree Species and Vegetation | 45 |
| a. | General Guidelines | 43 |
| b. | Recommended Plant Species for Informal Groupings on Public Streetscapes | 44 |
| i. | Trees | 44 |
| ii. | Shrubs and Groundcover | 44 |
| iii. | Raingardens and Bio-Swales | 44 |
| c. | Recommended Plant Species for Informal Groupings on Private Property and Parks | 45 |
| i. | Trees (Large) | 45 |
| ii. | Trees (Medium) | 45 |
| ii. | Shrubs and Groundcover | 45 |
| 5.0 | BUILDING DESIGN GUIDELINES | 46 |
| 5.0 | Building Design Guidelines | 47 |
| 5.1 | General Guidelines, Part 5 | 47 |
| 5.1.1 | Building Materials | 47 |
| 5.1.2 | Building Colours | 48 |
| 5.1.3 | Rainwater Design Elements | 49 |
| 5.1.4 | View Corridors | 49 |
| 5.1.5 | Variation in Building Design | 49 |
| 5.1.6 | Landscape Design | 50 |
| 5.2 | Commercial and Mixed Use Buildings | 51 |
| 5.2.1 | Streetwall Height | 51 |
| 5.2.2 | Residential Uses | 51 |
| 5.2.3 | Breaks in the Streetwall | 51 |
| 5.2.4 | Storefronts | 52 |
| i. | General Storefront Guidelines | 52 |
| ii. | Materials and Proportions | 52 |
| iii. | Entrances | 52 |
| iv. | Awnings and Canopies | 52 |
| v. | Landscape/Street Furniture | 52 |
| 5.2.5 | Setbacks | 52 |

| | | |
|------------|---|-----------|
| 5.2.6 | Signage and Lighting | 53 |
| 5.3 | General Residential Building Design Guidelines | 54 |
| 5.3.1 | Residential Setback Treatments | 54 |
| 5.3.2 | Ground Oriented Units | 54 |
| 5.4 | Medium Density Multi-Family | 55 |
| 5.4.1 | Setbacks | 55 |
| 5.4.2 | Building Form including Roofs | 55 |
| | a. Buildings up to 5 Storeys | 55 |
| | b. Buildings Higher than 5 Storeys | 55 |
| 5.5 | Low Density and Ground-Oriented Multi-Family up to 3 Storeys | 56 |
| 5.5.1 | Height, Massing and Variation | 56 |
| 5.5.2 | Roof Treatment | 56 |
| 5.5.3 | Rear Yard Setbacks | 57 |
| 5.5.4 | Pedestrian Access | 57 |
| 5.5.5 | Rainwater Management | 57 |
| 5.5.6 | Cladding | 57 |
| 6.0 | APPENDIX | 58 |
| 6.0 | Existing Relevant Policy | 59 |
| 6.1 | Supplementary Paving Specifications | 60 |
| 6.2 | Town Centre Core Lighting Specifications | 61 |
| 6.3 | Town Centre Core Lighting Specifications: For Pedestrian Pathways | 62 |
| 6.4 | Town Centre Core Lighting Standards | 64 |
| 6.5 | Town Centre Lighting Specifications | 65 |

1.0 OVERALL DESIGN PRINCIPLES AND OBJECTIVES

1.0 Vision for Lynn Valley Town Centre

Lynn Valley Town Centre is envisioned as a well-designed pedestrian, biking and transit-oriented mixed use centre in the heart of Lynn Valley that celebrates its natural and cultural setting and strong sense of community. Building on the existing strong commercial core with recreation and civic uses, a mix of new residential, commercial and employment uses, park and community space and green building design and infrastructure will create a more vibrant and complete community (Schedule A, District Official Community Plan, 2011).



Lynn Valley Town Centre Boundary

1.1 Design Principles and Purpose

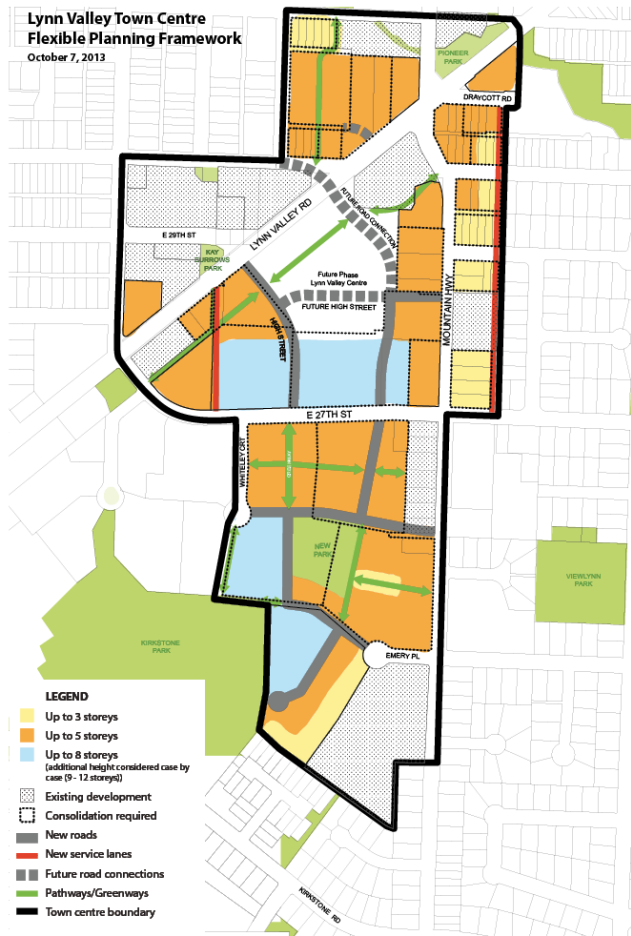
The purpose of this document is to provide a design framework for the built form and public realm consistent with community desire for a Mountain Village. These guidelines are applicable to the Lynn Valley Town Centre as outlined in the OCP, and the Flexible Planning Framework. The intention is to provide flexibility and encourage innovation as the Town Centre develops and grows into the future. References to local history, the use of natural colours, selected local plants and materials and inspiration for imaginative integration of rainwater management into the overall design is included in this document to support authenticity within the Mountain Village theme. The overall goal is to develop attractive, durable buildings appropriate to Lynn Valley and a public realm that complements the natural beauty of the North Shore, supporting the social, recreational and commercial life of the Lynn Valley community.

Guiding Urban Design Principles to Support the Vision:

1. Encourage design excellence and innovation in urban design, architecture and landscape architecture that clearly reflects and responds to Lynn Valley's unique mountain setting and local climate.
2. Connect to the wider Lynn Valley community and natural environment - establish an overall structure that integrates with and links to the surrounding community and streets to encourage active lifestyles and social connections. The location and design of buildings are to maintain key public views toward the mountain setting from new streets to and through the Town Centre.
3. Develop a unique sense of place - by the creation of linked plazas, parks and trails that reference the history, logging, etc.
4. Encourage variety and innovation in building form - encourage distinctive and innovative architecture that differentiates between developments and also differentiates buildings within larger developments.
5. Integrate authentic and natural materials - the design of both the public realm and private developments are encouraged to integrate locally and regionally available materials to further enhance the sense of the mountain village.
6. Provide a vibrant mixed use High Street - that creates a physical, social and economic heart for the community.
7. Integrate innovative, effective stormwater management into the design of the public realm and architecture.

1.2 Policy Context

The Flexible Planning Framework, approved by Council in 2013, builds on the land use policies in the District Official Community Plan and provides more detailed direction on built form and density.



Schedule B: Development Permit Areas of the Official Community Plan Bylaw 7900 includes a series of Form and Character Design Guidelines that apply to all commercial, industrial and multi-family development in the District, including the Lynn Valley Town Centre. Design elements from these OCP guidelines, though not repeated in this Lynn Valley Town Centre Public Realm and Design Guidelines, still apply. Where identified, the Lynn Valley Town Centre Public Realm and Design Guidelines offer additional design measures to provide clarity or further detail to the OCP design guidelines towards achieving the Mountain Village character and vision for the Lynn Valley Town Centre. In limited cases, where identified, the design measures in the Lynn Valley Town Centre Public Realm and Design Guidelines replace those provided in the OCP Form and Character Design Guidelines. See appendix for details.

1.3 Planning Framework

The overall planning framework reflects the community's desire to have a central heart for all of Lynn Valley. The plan includes a series of "hearts" (library plaza, High Street and the new neighbourhood park) each designed to provide unique opportunities and experiences and, when combined, provide a centre where people can live, work, play, recreate, learn and celebrate together. The planning framework aims specifically to include:

- New streets, including a High Street, to provide additional connections within the town centre and the surrounding community;
- A series of safe and pleasant walking, cycling and/or multi-use paths to provide opportunities to walk or cycle around and through the town centre on pathways as well as streets;
- Two small and one larger plaza along the High Street to encourage opportunities to meet, sit and relax;
- Two generous multi-use paths to create 'green spines' from the new neighbourhood park to the High Street and library plaza; and,

- A 1 ½ - 2 acre neighbourhood park for active play with a variety of spaces and activities for individuals of all ages and for community gatherings.

1.4 Other Relevant Documents

Other existing policies, studies and regulations that are relevant to and need to be reviewed in conjunction with these Design Guidelines:

- Development Servicing By-Law 7388 as amended (DSB) and other Municipal Standards
- Lynn Valley Town Centre Transportation Assessment, Urban Systems, 2013
- Hastings Creek Watershed: Ecology and Hydrotechnical Assessment, Raincoast Applied Ecology and Kerr Wood Leidal Associates, 2013
- North Shore Area Transit Plan, Translink, 2012

The above mentioned documents are not repeated in this Design Guideline document. Sections of these existing policies have been revised or expanded to meet design objectives and are outlined in appendix 6.0.

1.5 How to use this Document

These guidelines are intended to be used by property owners, developers and their design consultants, District staff and Council on how to achieve the community's vision for Lynn Valley Town Centre. The document contains statements that apply to all new development within Lynn Valley Town Centre to guide the form and character of commercial, multi-family and ground-oriented housing and their relationship to the public realm and surrounding neighbourhood.



Existing Civic / Commercial Plaza

High Street

Large Public Plaza

Small Public Plazas

Neighbourhood Park

2.0 OPEN SPACE GUIDELINES

2.0 Open Space Guidelines

Intent: Build on the vision and overall guiding principles to create a connected pedestrian/bike/transit oriented community that provides strong linkages to civic, mixed use commercial and park nodes and ample spaces for people to gather and interact. Provide a series of pedestrian pathways, pedestrian/cycle greenways and pedestrian mews that link key destinations, parks and plazas in the LVTC.



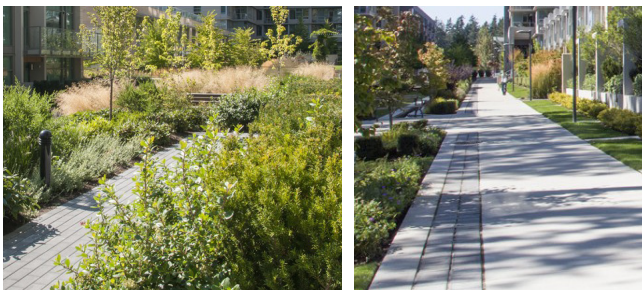
2.1 Pedestrian/Cycle Pathways

2.1.1 Town Centre Pedestrian Pathways

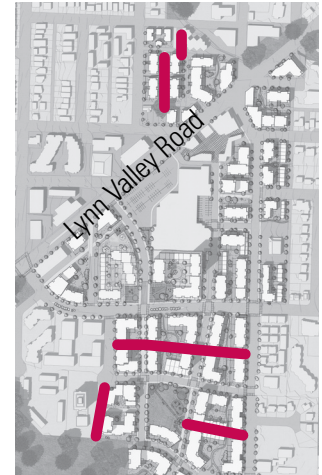
Intent: Design for a series of pedestrian focused pathways outside of the core, both north of Lynn Valley Road and south of East 27th Street. These pathways are intended to be publicly accessible pedestrian routes providing midblock access improving walkability and circulation within the centre.

Design Elements:

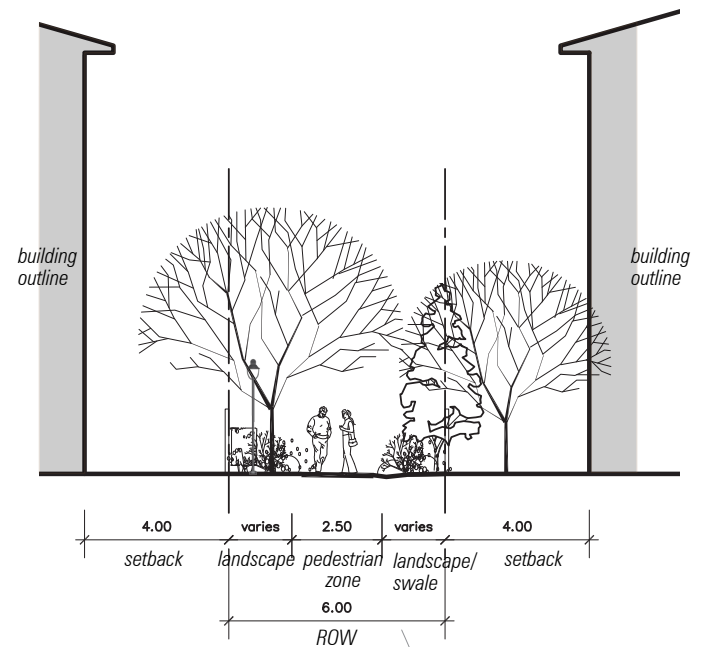
- a surface of concrete or concrete pavers selected from the paving palette for the Town Centre at a minimum width of 2.5 m should be provided
- the pathway is encouraged to meander within the right of way
- landscaping, trees including medium sized conifers and benches are encouraged between the buildings and the pathway surface except at building entries
- planting of non-invasive vine species or climbing plants on the buildings is encouraged where blank walls are present
- pathway surface should be sloped to a parallel drainage swale - benches should be located on the opposite side of the pathway
- buildings along the pathway should be encouraged to have windows and secondary entries if feasible
- furnishings such as benches and waste / recycling receptacles should be located on concrete pads within the landscape zone
 - concrete pads should extend 1.0 m in width under benches for strollers, etc.
 - benches should be set back 0.5 m from the edge of the concrete pad
- lighting should be provided at a pedestrian scale either with fixtures mounted on the adjacent buildings or with Town Centre standard pedestrian-scale lights
- incorporation of public art and integrated cues to wayfinding is encouraged as part of the design



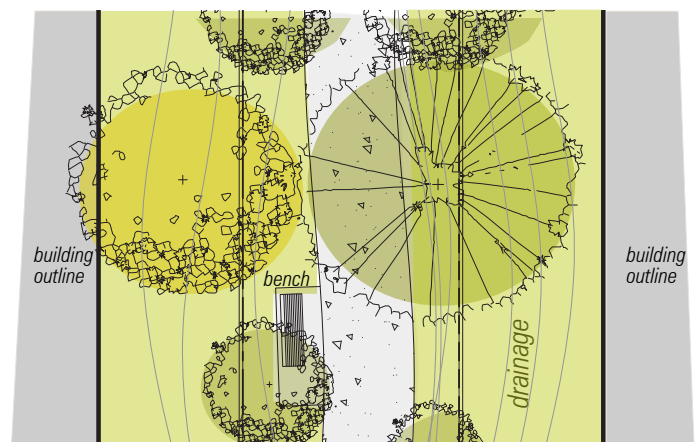
landscaping provides a buffer between private and public space



Section



Plan Segment





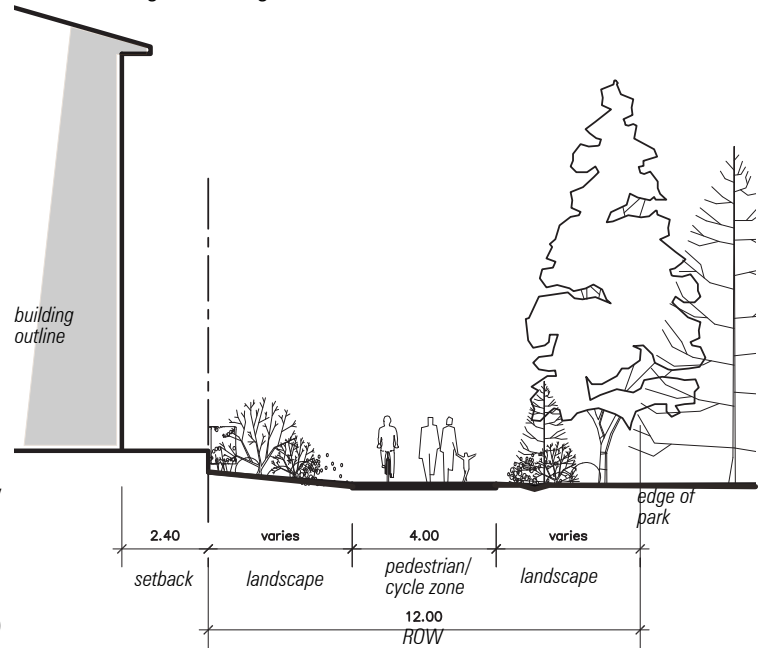
2.1.2 Town Centre Pedestrian/Cycle Greenway

Intent: Design for two generous multi-use paths ('green spines') to facilitate pedestrian and cycling movements within the centre and to link key destinations (Valley Centre Avenue, Library Plaza and the new neighbourhood park).

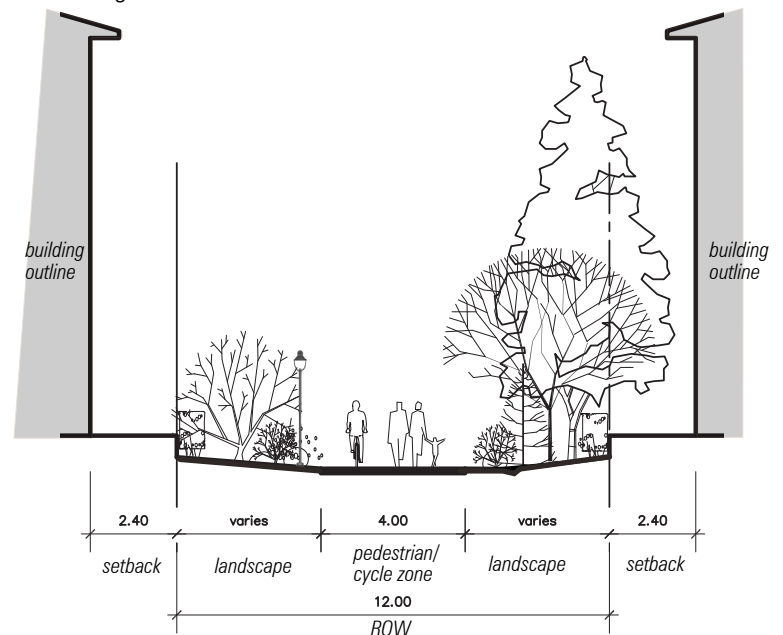
Design Elements:

- a minimum 12.0 m wide ROW including 4.0 m wide pedestrian/cycle path should be provided
- it is encouraged to meander within the ROW to accommodate planting, benches, etc.
- min 4.0 m wide landscape zone should be included on both sides of the path to accommodate tall trees
- the surface of the pathway should be concrete selected from the paving palette for the Town Centre
- pathway surface should be sloped to a parallel drainage swale
- benches should be located on the side of the pathway without the swale
- planting of non-invasive vine species or climbing plants on the buildings is encouraged where blank walls are present
- buildings along the greenway are encouraged to have windows and secondary entries if feasible
- furnishings such as benches and waste / recycling receptacles should be located on concrete pads within the landscape zone
 - concrete pads should extend 1.0 m in width under benches for strollers, etc.
 - benches should be set back 0.5 m from the edge of the concrete pad
- lighting should be provided at a pedestrian scale either with fixtures mounted on the adjacent buildings or with Town Centre standard pedestrian-scale lights
- incorporation of public art and integrated cues to wayfinding is encouraged to be part of the design

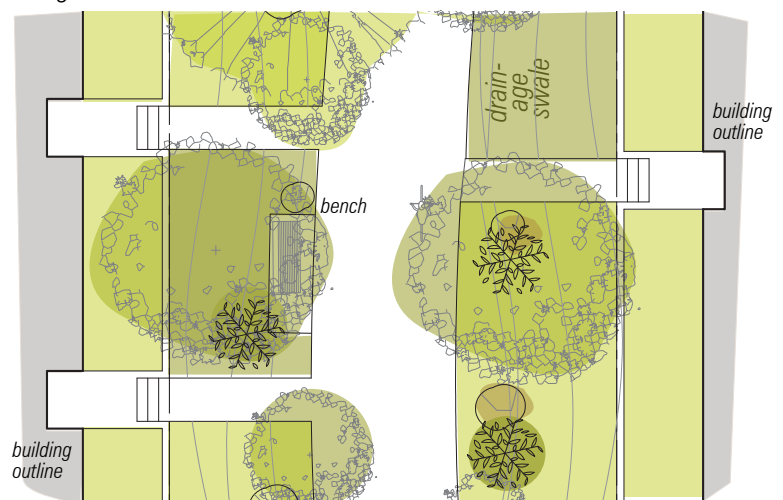
Section through Park edge



Section through residential street



Plan Segment



2.1.3 Town Centre Core Pedestrian/Cycle Greenway

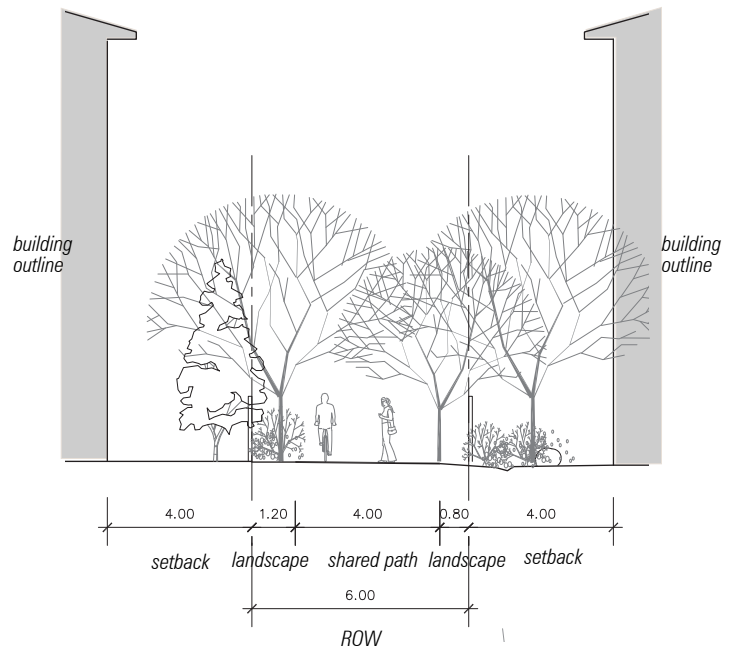
Intent: Design for a pedestrian/cycle connection from Valley Centre Avenue to East 27th Street to improve linkages from Kirkstone Park along Fromme Road to the Town Centre core.

Design Elements:

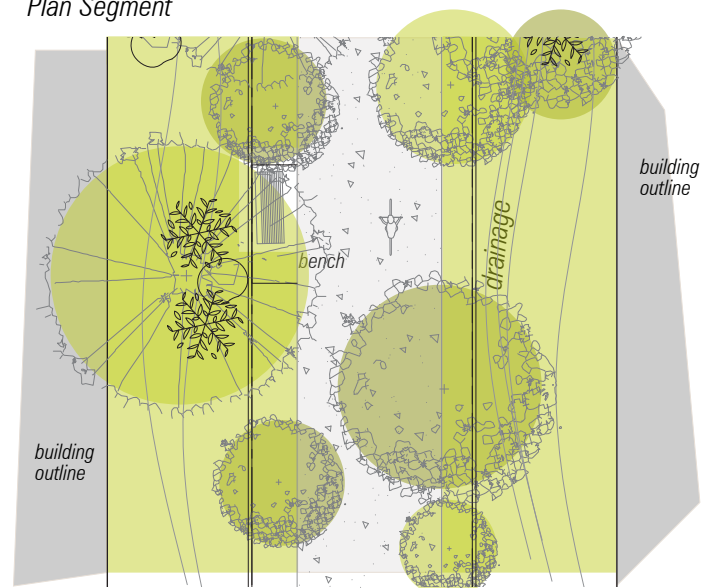
- a minimum 6.0 m wide ROW including 4.0 m wide shared pedestrian/cycle path
- landscape zone on both sides of the path to accommodate natural groupings of trees and shrubs
- garden walls combined with landscaping are encouraged along the property line
- the surface of the pathway should be concrete, selected from the paving palette for the Town Centre
- pathway surface should be sloped to a parallel drainage swale
- benches should be located on the side of the pathway without a drainage swale
- planting of noninvasive vine species or climbing plants on the buildings is encouraged where blank walls are present
- buildings along the pathway are encouraged to have windows and secondary entries if feasible
- furnishings such as benches and waste / recycling receptacles should be located on concrete pads within the landscape zone
 - concrete pads should extend 1.0 m in width under benches for strollers, etc.
 - benches should be set back 0.5 m from the edge of the concrete pad
- lighting should be provided at a pedestrian scale either with fixtures mounted on the adjacent buildings or with Town Centre standard pedestrian-scale lights
- incorporation of public art and integrated cues to wayfinding should be part of the design



Section



Plan Segment

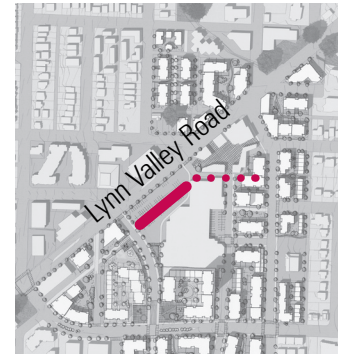


2.1.5 Town Centre Core Pedestrian Mews

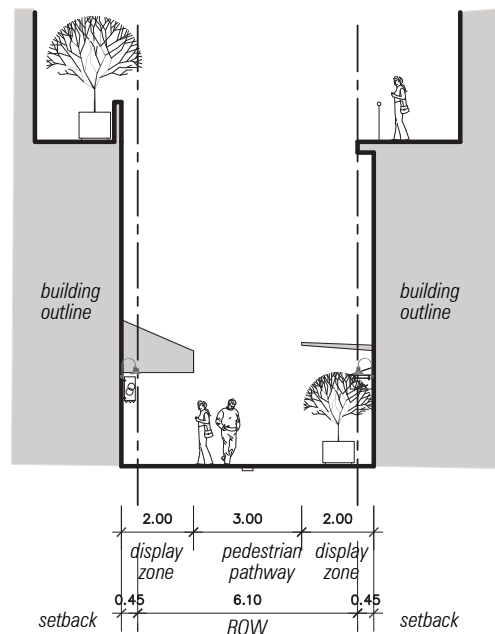
Intent: An intimate pedestrian mews with mixed-use retail and residential is intended to provide a pedestrian connection and retail linkage from Library Plaza to Valley Centre Avenue, the prominent shopping street.

Design Elements:

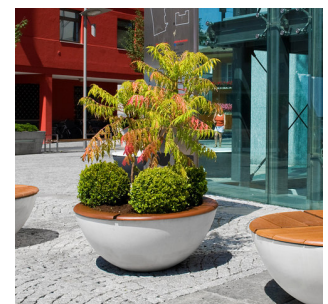
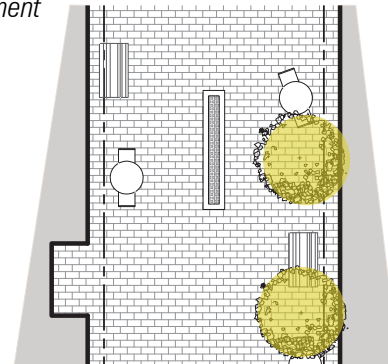
- a 3.0 m wide pedestrian zone is recommended flanked by a 2.0 m wide zone for seating, retail display, plants in containers, refuse and recycling containers, etc., on both sides
- a building setback of 0.45 m from the property line is recommended
- the surface of the mews should be pavers, consistent with the Town Centre core sidewalk treatment
- buildings should be encouraged to have windows and entries along the mews
- planting of non-invasive vine species or climbing plants on the buildings is encouraged where blank walls are unavoidable
- buildings along the mews are encouraged to incorporate pedestrian-oriented signs with wall mounted lighting integrated into the design
- wall mounted lights are encouraged along the length of the mews
- exterior, wall mounted brackets on the building façades to support seasonal lighting and banners are encouraged
- incorporation of public art and integrated cues to wayfinding should be part of the design
- the possibility of covering portions of the mews with a tensile structure or glazed canopy is encouraged



Section



Plan Segment



street furniture and planters to creating a unique public space

2.1.6 Green Lane

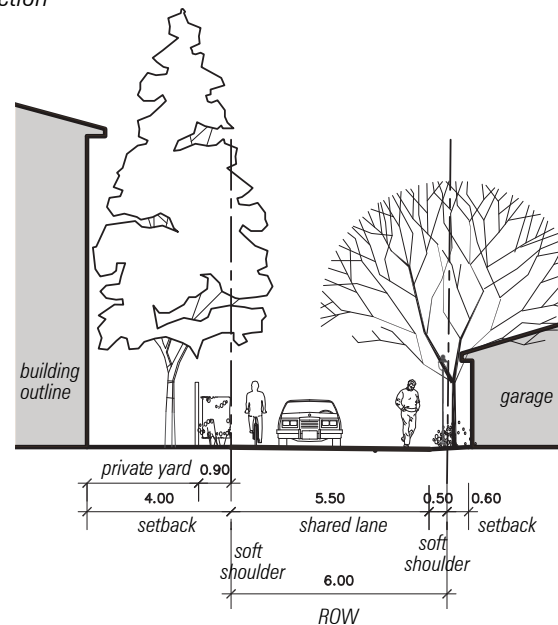
Intent: Design for a Green Lane east of and parallel to Mountain Highway, between East 27th up to Draycott Road. Intended to provide a buffer between the single family neighbourhood to the east and attached multi-family within the centre and an alternative route for cyclists off major streets.

Design Elements:

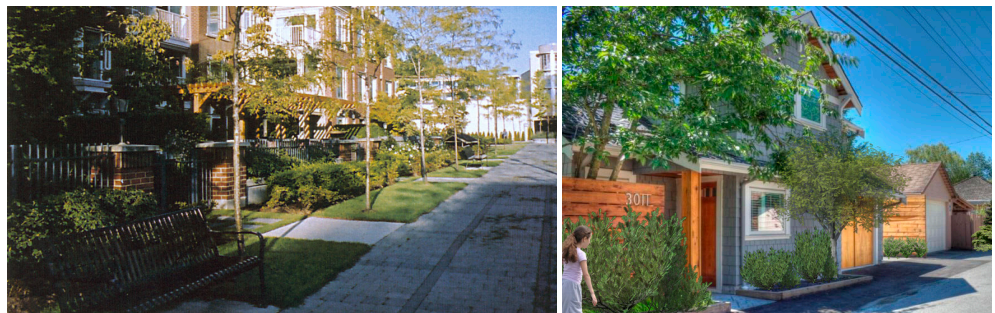
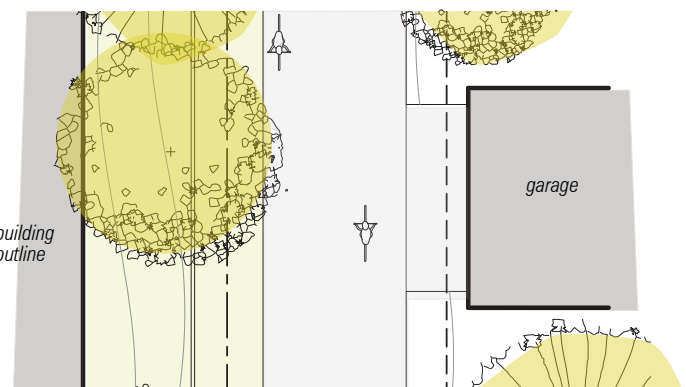
- dimensions should meet minimum District standards for a vehicular laneway with possible exceptions to allow trees or pockets of landscaping
- a surface of concrete or concrete pavers selected from the paving palette for the Town Centre is recommended
- cyclists should share the laneway with vehicles and pedestrians
- landscaping between the buildings and the lane surface is encouraged if space is adequate, except at building entries
- permeable surface treatment are recommended along the edges in the ROW if feasible
- min 0.9 m width for shrubs, ground cover and other plants is recommended on the west side
- planting of non-invasive vine species or climbing plants on the buildings is encouraged where blank walls are present
- buildings along the Green Lane should be encouraged to have windows and secondary entries, if feasible
- lighting should be provided at a pedestrian scale either with fixtures mounted on building façades or with Town Centre standard pedestrian-scale lights
- incorporation of public art and integrated cues to wayfinding is encouraged to be part of the design



Section



Plan Segment



the character of the Green Lane should be appealing to pedestrians and cyclists

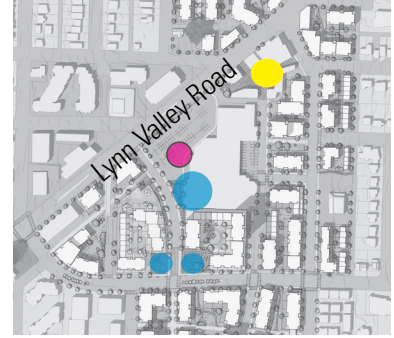
2.2 Public Plazas

Intent: Two public plazas are to be located on the north side of East 27th Street on either side of Valley Centre Avenue. These plazas are positioned to benefit from sunlight during the day. Together they are intended to form a gateway into the Town Centre core from East 27th Street.

Design Elements:

- ample seating opportunities should be provided in locations that will receive direct sun during the day and in places that have rain protection
- seating and tables should meet the needs of a broad range of users, optimizing comfort and accessibility
- the use of movable tables and chairs is encouraged
- seating should be designed to be integral to the design concept for the plaza and use materials that complement the material palette of adjacent buildings
- coordinate site furnishings (e.g. garbage containers, bike racks, lighting, tables and seating) with streetscape furnishings including a drinking fountain /water fill station in the large public plaza(s)
- an area where stormwater collected from building roofs or fixed canopies should allow infiltration into a rainwater garden, and be included on private property if space permits
- landscape plantings should respond to the theme of naturalized mountain landscape with a variety of native or similar species including a proportion of coniferous species
- paving should be compatible with the streetscape materials palette and patterned to both respond to surrounding building architecture (entrances, pilasters, etc.) and merge seamlessly into the overall paving pattern of adjacent sidewalks
- public art should be incorporated as free-standing elements that enhance the gateway function of these plazas; public art embellishments of furnishings (benches, storm grates, etc.) are also encouraged

● existing
● proposed
● post 20 years



plazas with solar access, comfortable places to sit and generous landscaping will become important Town Centre gathering places



examples of integrating stormwater management into plazas

2.3 Neighbourhood Park

Intent: Design for a new neighbourhood park south of East 27th Street. Details of park planning and design will be determined through a District-led park planning process. Preliminary Design Guidelines are provided below.

2.3.1 Park Planning - General

- provide large square or rectangular shaped, contiguous park space, to accommodate comprehensive park programming
- paved areas of the park should be integrated seamlessly into the adjacent streetscapes
- rain falling on adjacent sidewalks and any associated plaza areas should be well managed and considered a design feature within the park
- provide opportunities for users of all ages including children, youth, seniors and persons with disabilities
- provide flexibility for future demands
- where possible, landscape plans should take advantage of the opportunity to plant large, long-lived trees that are typical of the area's original mix of tree species; large trees will benefit from this one area of unlimited soil volumes to thrive in the Town Centre

2.3.2 Neighbourhood Park Guidelines

(Subject to Parks Planning Process)

- estimated park area of 1.5 - 2 acres
- provide an open lawn area for flexible multi-use including markets, concerts, outdoor community activities and opportunities for active and passive play
- programming of the park should anticipate space and infrastructure to support outdoor special events, gathering, seating and play opportunities related to the Town Centre (water supply, electrical supply, adaptable lighting fixtures, etc.)
- include places to gather, meet, entertain, see and be seen, sunbathe, picnic, play and rest
- incorporate an urban landscape expression with shade trees
- provide unique and innovative seating (also incorporating tables) to meet the capacity and needs of a broad range of users, optimizing comfort and accessibility



examples of furnishings and natural landscaping



outdoor special events

- integrate pedestrian and cycling circulation via a multi-use greenway to the east with a connection to Kirkstone Park
- coordinate site furnishings (e.g. garbage containers, bike racks, lighting, tables and seating) with streetscape furnishings including a drinking fountain /water fill station

2.3.3 Preliminary Play Programming

- address current and future need for active play in the community including informal, passive and adventure play
- provide an innovative neighbourhood children's play area focused on active play, incorporating the following:
 - minimum of 350 square meters of playground space with minimum 15 m width
 - the playground should accommodate up to thirty (30) 5-12 year old children with a minor component for tot aged children.
 - the playground should be designed to the highest possible standards of universal accessibility

other considerations:

- create a safe open environment, providing safe physical upper and lower body play challenges
- include social / imaginative play, and perceptual motor and physical development in the overall design
- provide a variety of play opportunities for children of all abilities with an emphasis on shared play
- incorporate features that stimulate the senses and foster inclusive play
- incorporate a logical circulation pattern allowing children to move from one activity to another in an interesting and challenging manner

- consider incorporating the following play amenities and elements:
 - overhead ladders (monkey bars)
 - climbing net
 - slide pole
 - inclined ladders, climbing structure (also for adults – e.g. pull-ups)
 - ground level imaginative activities,
 - balancing activities
 - slide(s)



generous areas of open space and innovative play structures

3.0 SPECIFIC STREET DESIGN GUIDELINES

3.0 Specific Street Design Guidelines

The following section provides guidelines for specific streets including: the High Street, Library Lane, East 27th Street, and new local streets in the town centre

3.1 High Street (Valley Centre Avenue):

Intent: To create a high quality pedestrian oriented shopping street that can be partially closed off during events.

Design Elements:

- infrastructure including structural support, electricity, water supply and removable bollards (to accommodate seasonal and/or community events including the ability to close off portions of the street to vehicles) should be integrated
- public art in a variety of forms including free standing or within paved areas is highly encouraged
- Within the central section of High Street the use of a variety of tree species is recommended
- Abbotsford Standard Series 'Natural' running bond concrete pavers are recommended for hard surfaced areas of the public and private realm
- Travel lanes are recommended at 3.0 m wide, on street parking at 2.4 m wide, furniture zone and planting clusters at 2.8 m to 5.2 m wide and a clear pedestrian zone at 2.8 m wide
- Abbotsford Standard Series 'Charcoal' herringbone concrete pavers are recommended for travel lanes and on-street parking
- Flush curbs/concrete bands that incorporate trench drains with decorative covers are recommended for enhanced pedestrian mobility.
- concrete paving with sawcut joints is recommended for pedestrian crossings at the entrances to the High Street
- consider locating public art at one end of the pedestrian crossing at the entrances to the High Street
- landscaping including taller trees and conifers, if appropriate, boulders, seating and possible public art incorporated into the paving material are recommended at areas of architectural interest

refer to Section 4.2 for stormwater management guidelines



community/seasonal street events

3.1.1 High Street Planting

The location, size and distribution of street trees clusters and vegetation is a critical determinant of the street and Town Centre character. The following guidelines apply:

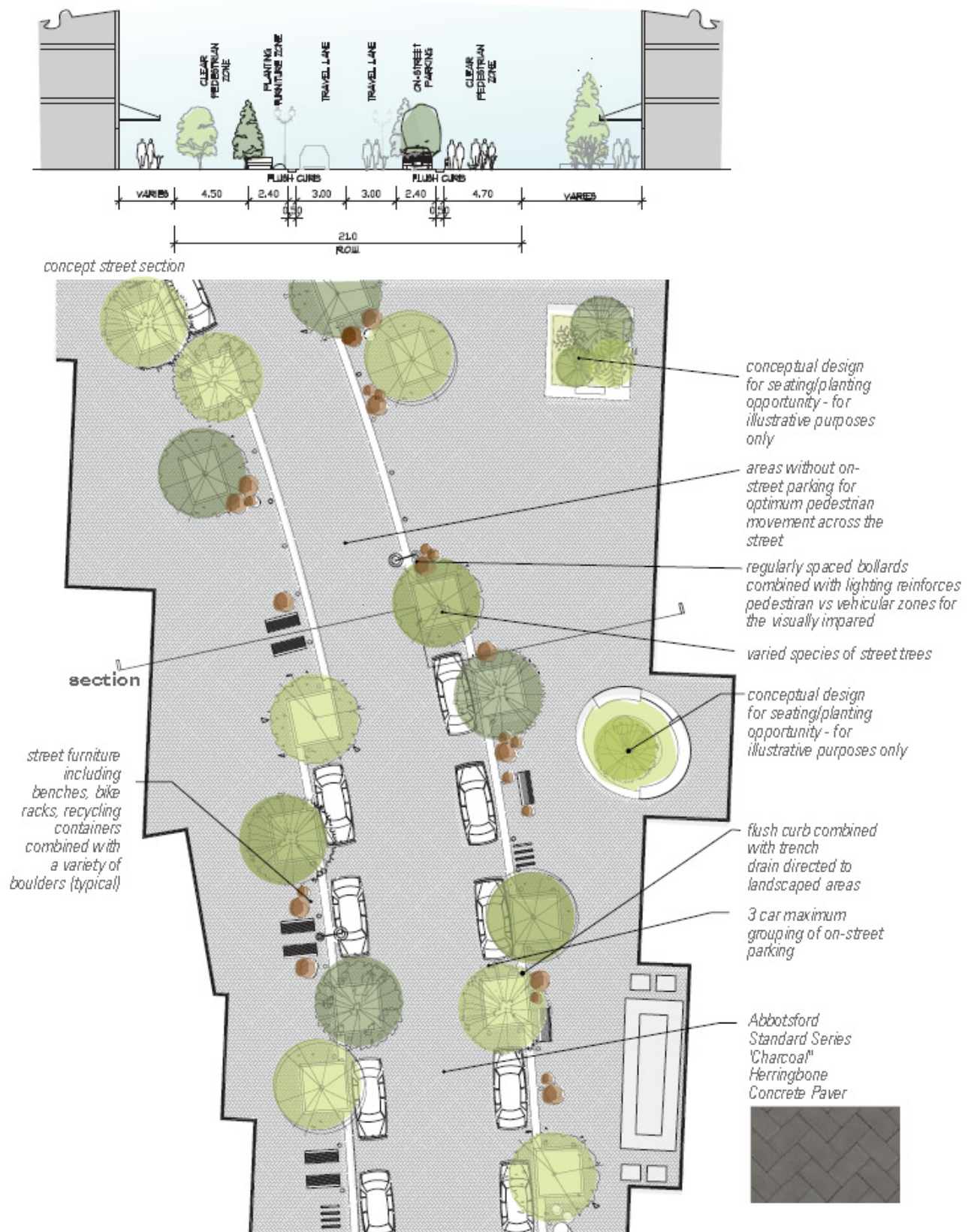
Design Elements:

- Tree clusters should be situated in such a way as to provide adequate unobstructed open space for public events.
- Understorey plantings within the street RoW, within the Central area of High Street should be avoided to improve visibility and free movement of pedestrians.
- Benches should be arranged in such a way as to encourage social interaction. Benches should provide a 1.0m wide clear space to accommodate wheelchairs, strollers, scooters etc.
- Spaces between tree planters are important opportunities for pedestrian level lighting, seating, bike parking, public art and other amenities. These elements should be arranged in a way that does not impede pedestrian movement from one side of the street to the other
- Tree clusters are encouraged on private property and at either end of High Street.
- Tree clusters should have a minimum width of 3.0 m and the minimum distance between clusters should be 3.0 m
- Each cluster should provide diversity in plant species and should incorporate a variety of native tree and understorey shrub species.
- distances between tree clusters should vary
- clusters should not be located directly opposite from each other
- ground cover and/or low shrubs should be incorporated into the tree cluster beds as outlined in Section 4.4 Street Trees Species and Vegetation
- a variety of boulders, logs and other natural elements should be integrated into all planted areas
- a maximum of 3 on-street parking spaces are recommended between tree planter areas



example of art integrated into planting and seating area

Concept diagram for the High Street (Valley Centre Avenue)



3.2 Library Lane

Intent: To create a unique residential street, secondary to the high street, which will provide strategies to slow traffic and identify this as an important connection within the core to link the library plaza and surrounding area and commercial uses to the rest of the Town Centre.

Design Elements:

- Abbotsford Standard Series 'Natural' running bond concrete pavers are recommended for hard surfaced areas of the public and private realm which will include concrete bands from the inboard edge of the curb extending to the face of the building/areas of private outdoor space/landscaping
- Abbotsford Standard Series 'Charcoal' herringbone concrete pavers are recommended for travel lanes
- travel lanes are recommended at 3.5 m wide, planted boulevards at 2.3 m and sidewalks at min 2.0 m
- landscaping including taller trees and conifers, if appropriate, boulders, seating and possible public art are recommended at areas of architectural interest including building entrances, consistent with the Mountain Village theme

3.2.1 Library Lane Planting

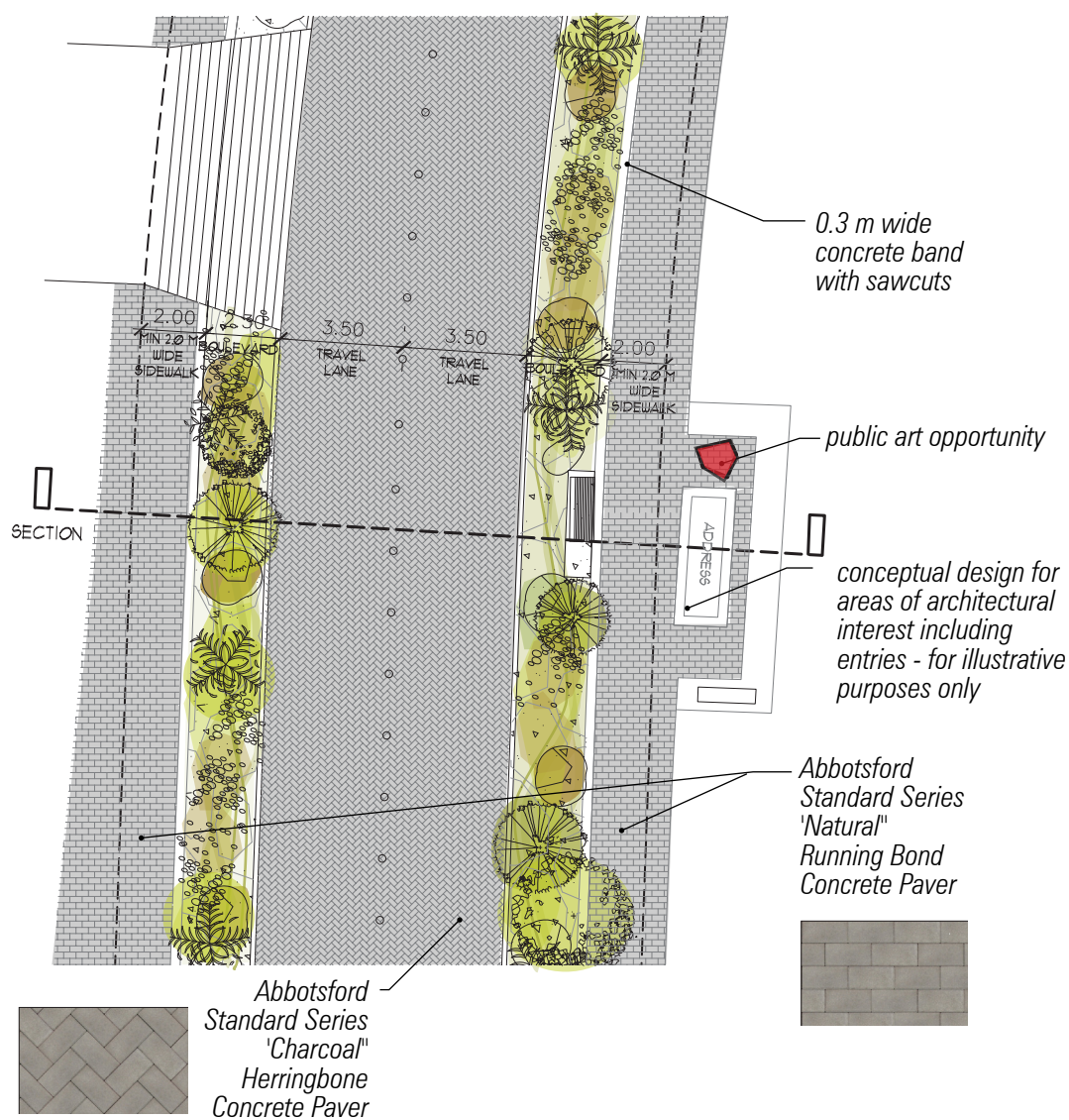
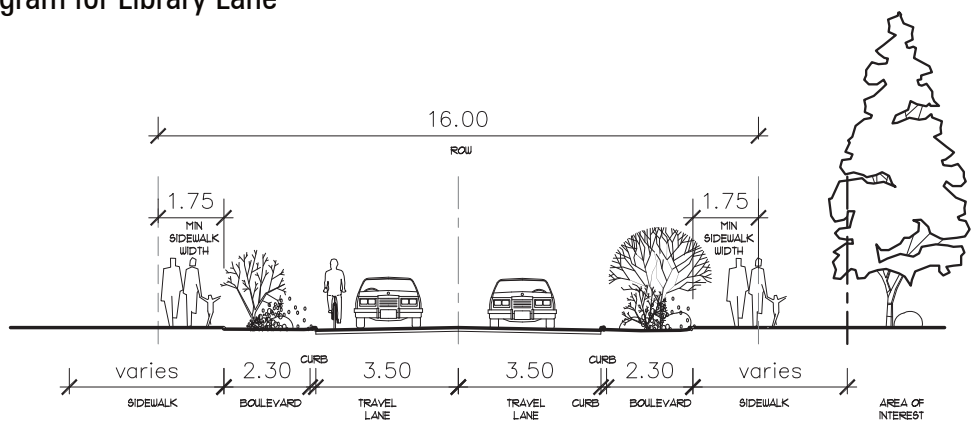
The location, size and distribution of street tree clusters and vegetation within the planted boulevards and any areas of private planting adjacent to the public realm are critical determinants of the street and Town Centre character. The following guidelines apply:

- boulevards should provide variety and diversity in plant species
- a variety of boulders, including some large boulders, should be integrated into all planted areas
- benches should be integrated into boulevard design, oriented to the sidewalk on a concrete pad 1.2 m wide and the length of the pad should accommodate the bench plus 1.0 m of clear space for wheelchairs, strollers, etc.
- recycling and trash receptacles should be located on concrete pads, within the boulevard, adjacent to the sidewalk
- pedestrian level lighting should be integrated into the boulevard design
- public art is encouraged within the boulevard or at areas of architectural interest, including entries, in a variety of forms including free standing or within paved areas
- refer to Section 4.2 for stormwater management guidelines



example of boulevard planting and treatment

Concept diagram for Library Lane

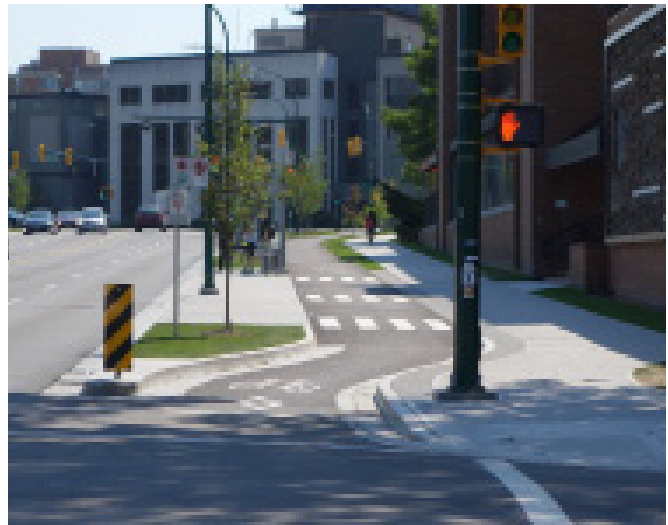


3.3 East 27th Street

Intent: To create an environment which facilitates pedestrian, cycling, transit and vehicular connections and provides safe arrival to the centre of the community. Bike facilities will be separated from vehicular travel and integrated with the transit hub allowing for safe cycling movements to and from the core.

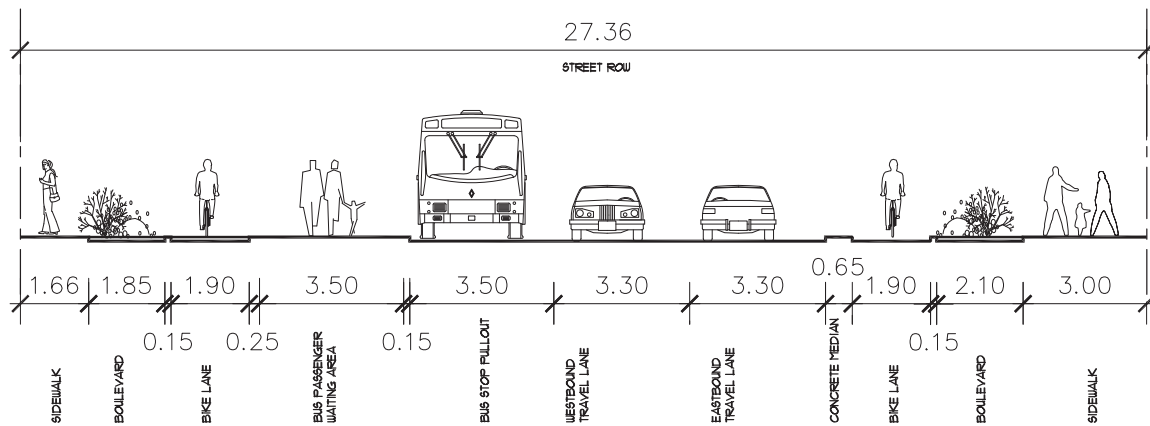
Design Elements:

- the public realm along the north edge of East 27th Street is intended to seamlessly connect the overall design theme and natural material selection of the High Street and Library Lane
- East 27th Street should integrate clusters of street trees (refer to 3.1.1 High Street).
- opportunities for public art and adequate provisions for bike racks should be integrated into this portion of the street
- a public art program could be used to develop the design of unique bus shelters
- Abbotsford Standard Series 'Natural' running bond concrete pavers are recommended for hard surfaced areas of the public and private realm excluding concrete bands from the inboard edge of the curb along the north edge of this street extending to the face of the building/areas of private outdoor space/landscaping
- travel lanes and bike lanes, varying in width, will be asphalt
- where required, sections of the bike lanes should be raised on sloping curbs to accommodate min 2.0 m wide pedestrian crossings with Abbotsford Standard Series 'Natural' running bond concrete pavers bounded by 0.3 m wide concrete bands
- bike parking facilities should be included in close proximity to the transit hub
- refer to 3.4 New Local Street for detailed guidelines for the portion of the street south of the bike lane which includes aggregate banding as outlined in appendix 6.1 Supplementary Paving Specifications
- refer to Section 4.2 for stormwater management guidelines
- see also 4.1.1 Cycle Lanes and Paths and section 4.1.7 Transit Shelters

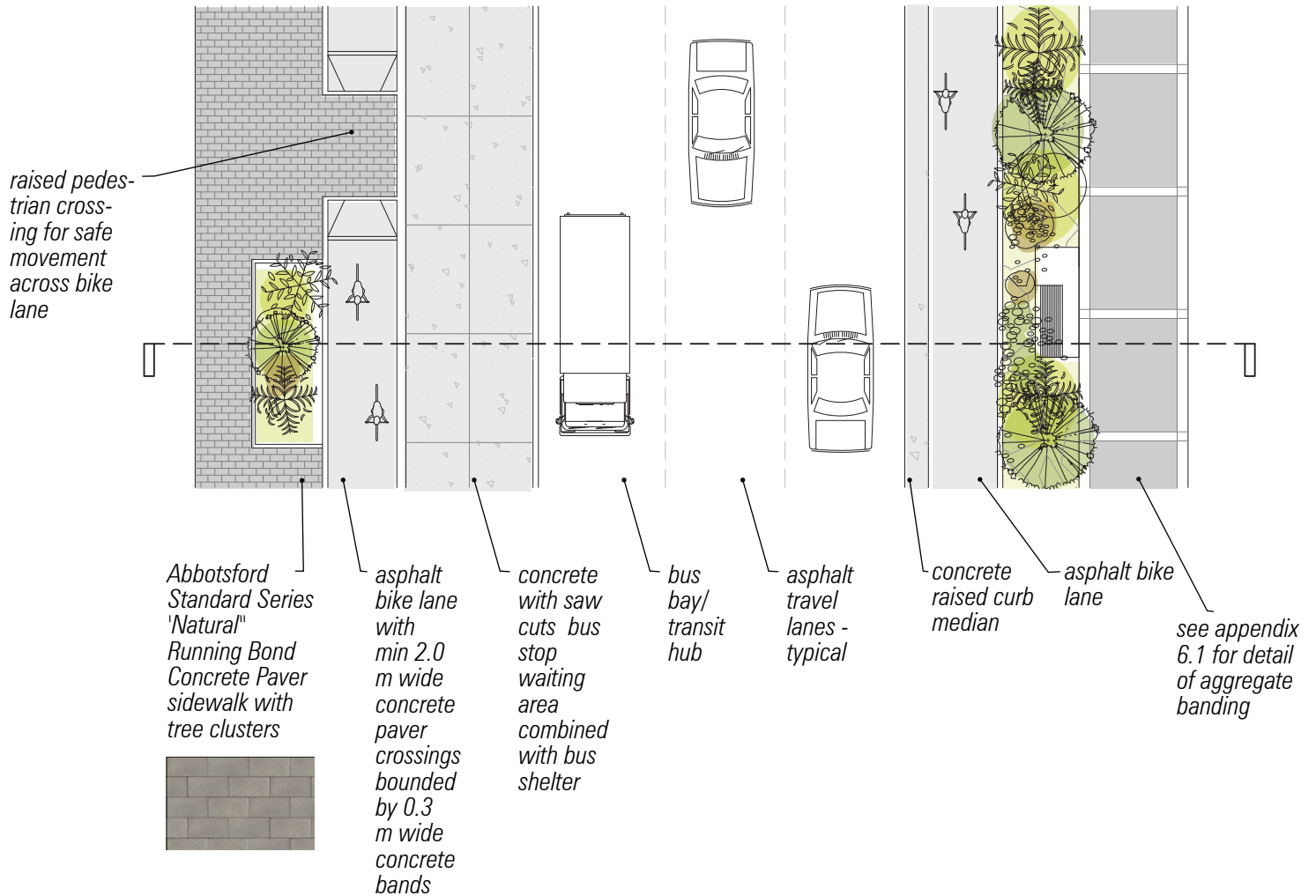


examples of bus stop bike lane condition

Concept diagram for East 27th Street



section



3.4 New Local Streets:

Intent: To continue the expression of the mountain village theme with planting, pavers, lighting, placement of boulders, that are consistent with those in the town centre core.

Design Elements:

- Abbotsford Standard Series 'Charcoal' herringbone concrete paver is recommended for on street parking to relate to the paving materials within the Town Centre Core
- standard broom finish concrete sidewalks are recommended for all New Local Streets
- pedestrian level lighting, low shrubs or groundcover, boulders and recycling receptacles are recommended at both ends of pedestrian crossing within the planted bulges

3.4.1 Local Streets Planting

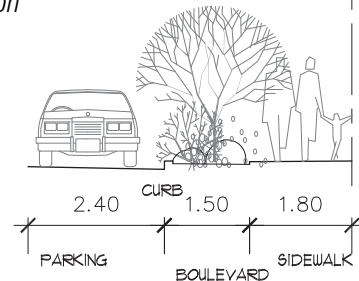
The location, size and distribution of street trees and vegetation within the planted boulevards is a critical determinant of the street and Town Centre character and the following guidelines apply:

- boulevards should provide variety and diversity in plant species
- a variety of boulders, some very large, should be integrated into all planted areas
- benches should be integrated into boulevard design, oriented to the sidewalk on a concrete pad 1.2 m wide and the length of the pad should accommodate the bench plus 1.0 m of clear space for wheelchairs, strollers, etc.
- recycling and trash receptacles should be located within the boulevard, adjacent to the sidewalk
- pedestrian level lighting should be integrated into the boulevard design
- refer to Section 4.2 for stormwater management guidelines

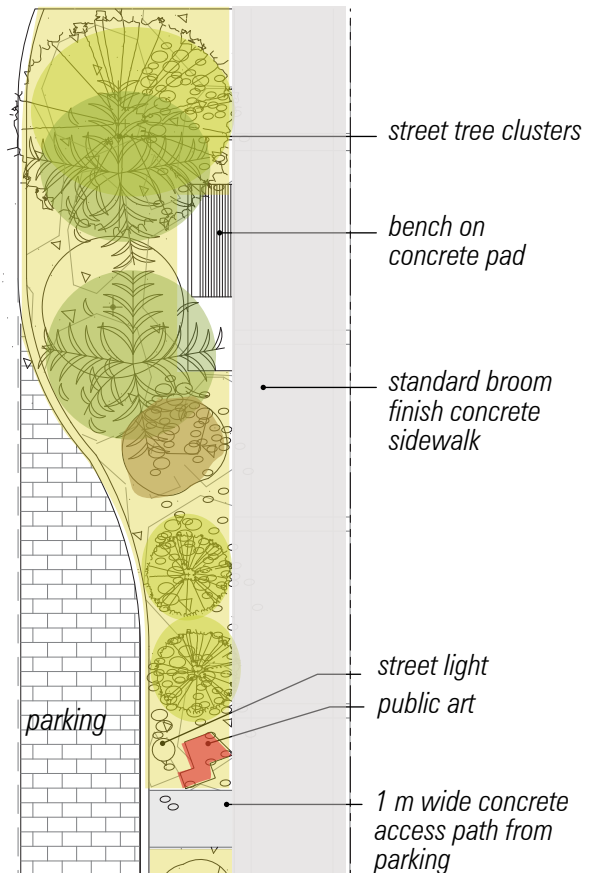


Concept diagram for Local Streets

Section



Plan segment



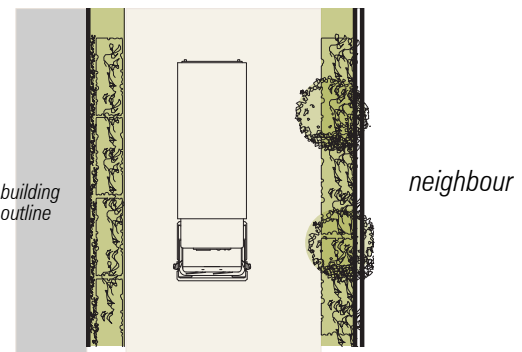
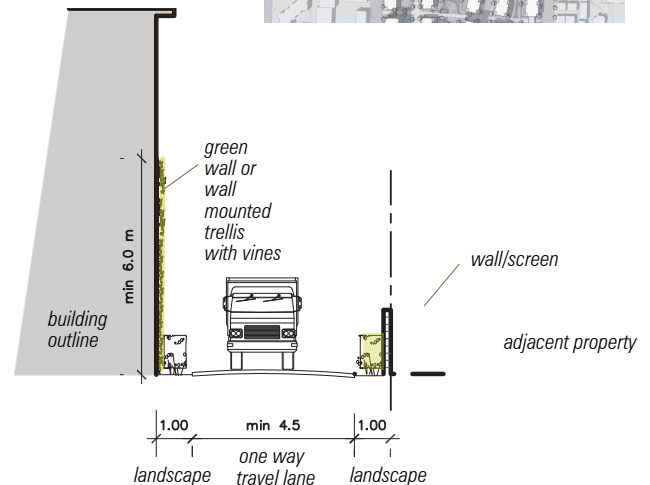
3.5 Service Passage

Intent: Design for a one-way service passage that connects from East 27th Street to Lynn Valley Road to facilitate loading and unloading off of the High Street

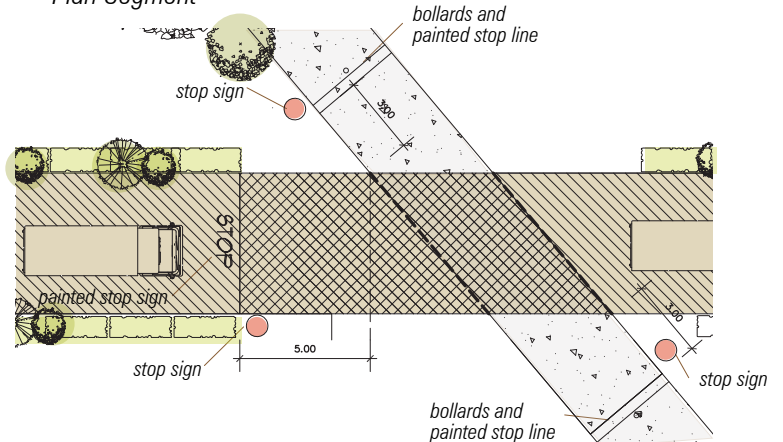
Design Elements:

- A min 4.5 asphalt one way travel lane to accommodate semi-trailer trucks
- A min 1.0 m wide landscape strip adjacent to the grocery store
- A min 1.0 m wide landscape strip along neighbouring property lines to accommodate shrubs, hedges and/or ground cover
- additional landscaping is encouraged in areas within the ROW that are not required for truck traffic
- building façade should incorporate a green wall or 6.0 m high trellis to support non-invasive perennial climbing vines wherever possible
- screening unattractive views into the Service Passage and modulating disturbing noise caused by truck movement should be considered in the design of landscaping, walls, fences or screens along common property lines
 - it is recommended that the wall/fence/screen be designed to absorb noise if possible
- lighting should not spill or produce glare into adjacent property
- lighting fixtures mounted on the building façade above truck height are expected
- where the Service Passage intersects with the Town Centre Core Pedestrian/Cycle Greenway, free standing stop signs adjacent to the travel lane and painted signs on the asphalt to ensure truck drivers stop min 5.0 m from the edge of the greenway are suggested (see plan segment)
- a contrasting strip of paving material or painted line, a free standing stop sign adjacent to the pedestrian/cycle greenway and/or a bollard min 3.0 m from the edge of the service passageway travel lane are suggested (see plan segment)
- bollards that can be repainted if damaged and easy to source to replace are recommended
- the height of landscaping installed within 3.0 m of the intersection of the Service Passage with the Greenway should maintain clear and safe sightlines
- loading bays should be located to prevent trucks backing up within 5.0 m of the Greenway

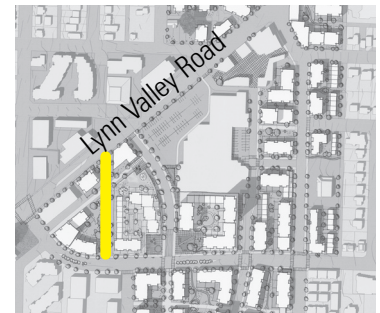
Section



Plan Segment



plan segment of Service Passage intersection with Town Centre Core Pedestrian/Cycle Greenway



4.0 GENERAL STREET DESIGN GUIDELINES

4.0 GENERAL STREET DESIGN GUIDELINES

These street design guidelines are intended to support a high quality public realm consistent with the Mountain Village theme and to complement existing street design elements in the Town Centre.

4.1 Street Design Elements

- Public art treatments of street furniture add to the design, character and pedestrian experience of the streetscape; the inclusion of unifying public art design is encouraged.
- Paving materials and street furniture should be complementary to those already established for Lynn Valley Road, and East 27th Street, but with colours and materials that reflect the contemporary nature of Library Square.
- Refer to Section 3.2.1 and 3.2.2 for detailed guidelines for High Street and Library Lane.



LEGEND

- New roads
- - - Service lane

4.1.1 Cycle Lanes and Paths:

Intent: To encourage cycling and walking by providing convenient, safe and enjoyable routes.

Design Elements:

- on-street cycle lanes should be defined by reflective, slip resistant white stripes and bike silhouette graphics
- multi-use paths should be 3.0m minimum wide continuous paved surface, well lit, without abrupt slope changes or raised curbs
- East 27th to be designed as a AAA bike facility and include protected bike lanes and safe intersection design
- bike lanes should be designed to avoid conflicts with the transit hub (refer to section 3.3)



attractive landscaping and clear markings encourage cycling

- bike parking facilities should be incorporated in close proximity to the transit hub
- separated bike lanes should be integrated into the north and south portions of the High street to allow for safe arrival to the destination street
- bike parking facilities should be provided at these arrival points

Pedestrian Connection Plan



- Sidewalk
- Pedestrian link

Bike Facilities Plan



- Triple A Separated Bike Facility
- On-road bike route

4.1.2 Parking Pockets including Furniture and Planting Zone:

Intent: Parking pockets are to provide sufficient on street parking alternating with trees landscaping, benches and street lighting along all streets

Design Elements:

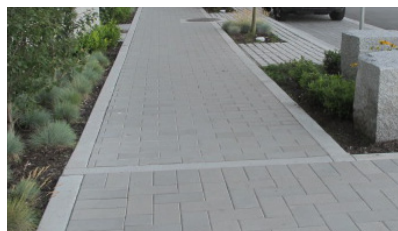
- this zone is the appropriate location for street lights, street furniture, transit shelters, wayfinding, signage and landscape areas
- pavers are preferred in parking pockets
- consider including infrastructure and priority spaces for electric vehicles
- furniture within this zone should be chosen, coordinated, located, spaced, and aligned to maximize space for planting and create a high quality, visually harmonious appearance
- hard surfaces within this zone should be permeable, related in colour to adjacent pavements
- along residential frontages, landscaping should dominate, (consistent with Section 4.3 Street Trees and Vegetation), and be combined with rain and stormwater management facilities (section 4.2)
- a 0.45 m wide hard surface access path from sidewalk to parking located on the boulevard between every 2 on-street parking spaces is recommended.
- accessible parking spaces should be located adjacent to a curb letdown



example using native plants and boulders within the parking/furniture/planting zone



corner bulges are opportunities for landscaping and rainwater management



access paths to on-street parking

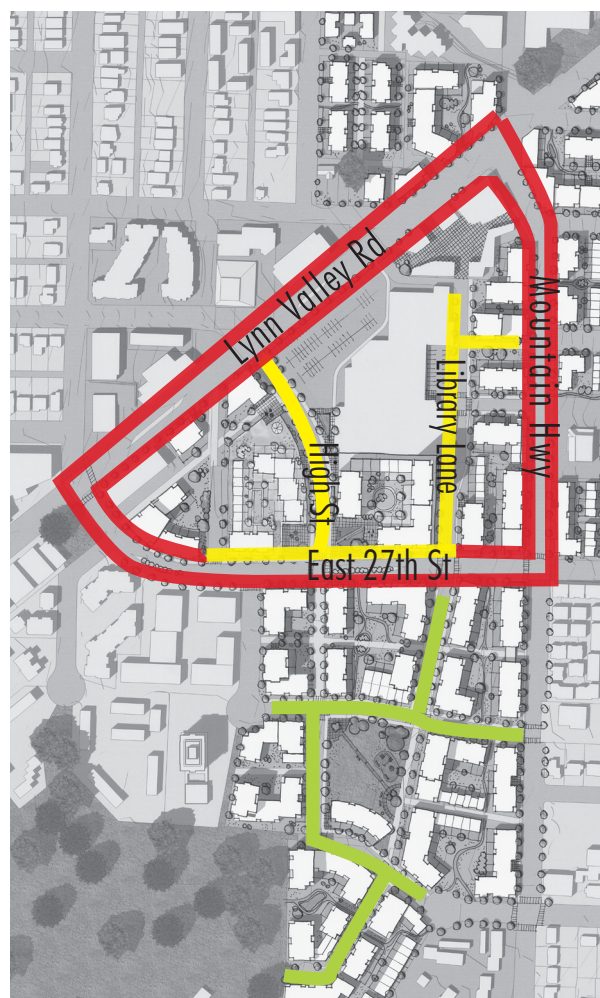


providing places for seating and retail displays is important to the pedestrian-oriented Valley Centre Ave

4.1.3 Sidewalks

Intent: To provide safe, accessible, pedestrian friendly connections throughout the town centre. Sidewalks will be defined by three material selections: Town Centre Core Streets (yellow) will utilize pavers as outlined in sections 3.1, 3.2, 3.3. Local street sidewalks (green) will be consistent with overarching design objectives outlined in section 3.4. Town centre streets (red) including Lynn Valley Road, Mountain highway and East 27th (see map) will include aggregate banding outlined in appendix 6.1 consistent with existing town centre paving details. Specific locations are outlined below and in the associated town centre map.

- i. Pedestrian Zone:
 - All sidewalks must include a path of travel, free of overhead obstructions below a height of 2.0m.
 - Sidewalks widths and treatments vary based on the street type seen the LVTC key map.
- ii. Town Centre Core Streets (Yellow)
 - See Street Specific Design Guidelines for sidewalk details.
- iii. Town Centre Connector Streets (Red)
 - On all Town Centre Connector Streets, the sidewalk treatment should include standard broom-finished concrete and exposed aggregate banding. A minimum 2.0m wide sidewalk should include:
 - 1.5m (min) wide standard broom-finished concrete,
 - 0.3m wide aggregate band on the curb side of the sidewalk,
 - 0.2m wide aggregate band on the property side of the sidewalk.
 - Additionally, along the length of the sidewalk, 0.3m wide perpendicular aggregate cross-banding should be designed in a pattern using 1.2m modules ranging from 1.2m to 4.8m spacing, in random combination.
 - Exposed aggregate banding should use Chilliwack Stone aggregate. A concrete sealer should be placed on the surface to finish the installation.



- Town Centre Core Streets (refer to Sections 3.1, 3.2, and 3.3)
- Lynn Valley Town Centre streets (refer to appendix 6.1)
- New Local Streets (refer to Section 3.4)

sidewalk treatment key plan

- This banding should be provided on both sides of the road, except on the North side of East 27th Street, between Valley Center Avenue and Library lane, where the sidewalk treatments will be pavers, similar to the Town Centre Core Streets.
- iii. New Local Streets (Green)
 - See Street Specific Design Guidelines for sidewalk details.

4.1.4 Accessibility

Intent: to design for pedestrian environments and streets that are safe for all user groups

- avoid changes of grade or gaps in paved surfaces greater than 6 mm
- avoid pavement slopes greater than 5% in direction of travel and 2% cross slope
- to assist the visually impaired, provide tactile strips adjacent to crossings and between surfaces, such as at curbs
- provide smooth walking surfaces
- sawcut joints are preferable to tooled joints
- provide bench pads that are 1.0 m longer than the proposed bench to accommodate strollers, wheelchairs, scooters. etc.

4.2.5 Pedestrian Crossings

Intent: All intersection and mid-block pedestrian crossings should be marked by high-visibility crosswalks.

i. Pedestrian priority:

- landscaped corner bulges at intersections and mid-block crossings with curb extensions shorten pedestrian crossings and are encouraged unless through traffic curb lanes are required
- mid-block crossings are recommended only when absolutely necessary

ii. Special intersections and mid-block crosswalks:

- consider incorporating crosswalks into special curbless shared streets at locations adjacent to public open spaces
- locate crossings to link existing or proposed pedestrian pathways

iii. Accessibility:

- provide curb ramps with detectable change of texture at crossings.

- Include audible tones and pedestrian countdown signals at signalized crossings and consider fully accessible pedestrian signals including braille, vibrating plate and audible location identifier

iv. Lighting:

- Provide pedestrian scale light fixtures with increased light levels to highlight pedestrian crossings and pathways

4.1.6 Street Furniture

Intent: Street furniture within the Town Centre should match or complement the type and appearance of the Library precinct street furniture (see schedule E.1.4 Section 8). Special designs related to Lynn Valley themes are encouraged including public art and/or artist-designed elements. Street furniture to be included in the Town Centre Core should be stainless steel. Street furniture on new local streets and the sides of East 27th Street, Mountain Highway and Lynn Valley Road opposite from the Town Centre Core should be finished with Dark Green (LUMEC#GN8).

i. Benches:

- refer to adjacent images for preferred benches and seating designs
- benches, trash and recycling containers, bike racks etc. should be part of the same product line to ensure visual continuity
- pads for benches not within the furniture zone should be 1.0 m longer than the proposed bench and of the same material as the sidewalk

ii. Recycling Containers (including organics):

- choice of recycling containers is dependent on the District's recycling policies and infrastructure which determine how many categories of recycling are sorted separately and where they are sorted

iii. Bicycle Racks:

- bike racks should be selected to address the anticipated usage at locations throughout the Town Centre
- explore the possibility of using bike racks as public art
- individual rings or "U"s offer the potential to be placed in small or large numbers



preferred Lynn Valley Town Centre benches and seating



examples of Library Plaza recycling containers



examples of recommended bicycle racks



examples of water fountains including opportunities as public art

- iv. Newspaper Dispensers and Mailboxes
 - these should be integrated into the appropriate colour palette but require coordination with newspaper companies and Canada Post
 - should be located adjacent to bus stops, in the furniture zone
- v. Water Fountains:
 - models that meet requirements for access by people in wheelchairs should be used
 - seek opportunities for integrating public art into these elements
- vi. Utility Covers
 - utility covers that reflect the Town Centre themes are recommended
 - consider local art competitions to develop specific designs
- vii. Fire Hydrants
 - Heritage fire hydrants to be used within the town centre

- materials should be durable and easily maintained
- shelters should be generally enclosed at the back and at least a portion of one side by clear glazing for wind protection and visibility. Advertising poster display should be confined to one vertical side surface
- design of transit information signage and street furniture associated with transit shelters, such as recycling containers and advertising poster display systems, should be compatible with transit shelter designs
- energy efficient lighting should be incorporated into shelter designs
- consider solar photo voltaic opportunities for lighting, and possibly to heat benches

4.1.7 Transit Shelters

Intent: Transit shelters should provide an appropriate level of weather protection, lighting and seating for the expected number of transit users. Where feasible, transit shelter design should be integrated into the building design.

- transit shelter design should be consistent with the street and street furniture character and complement the surrounding public realm design
- transit shelters should exhibit a high standard of contemporary design, compatible with architectural character expected of new Town Centre buildings



example of incorporating the transit shelter design into the Lynn Valley Library architecture

4.1.8 Public Art

Intent: To provide visual interest and animate the public realm with a range of artistic elements which highlight and reinforce the Lynn Valley Town Centre themes and the character, history, climate and ecology of Lynn Valley. Potential materials and theme include boulders, wood, natural forms and shapes.

- public art that combines practical and artistic objectives such as seating, water fountains and wayfinding, is encouraged
- opportunities to integrate the movement, collection and potential energy of rain into public art pieces are strongly supported
- public art that integrates wayfinding is encouraged
- public art that provides a contrast to the natural elements within the Mountain Village theme are recommended, to provide colour, interest and diversity
- public art pieces that are interactive and function as play elements should be encouraged
- public art treatments of street furniture add to the design, character and pedestrian experience of the streetscape; the inclusion of unifying public art design is encouraged
- the design of lighting in conjunction with public art is encouraged
- recommended locations for public art include:
 - gateways
 - plazas
 - public or private outdoor seating areas
 - transit stops
 - entrances or interest areas in neighbourhood parks
 - at commercial or residential entrances
 - at pedestrian pathway entrances or nodes
 - included in street furnishing design

Note: A 'Lynn Valley Town Centre Public Art Plan' will be developed to highlight specific opportunities within the Town Centre.



examples of public art complementary to the Mountain Village and rainwater themes



elements that refer to historic log flumes are highly recommended

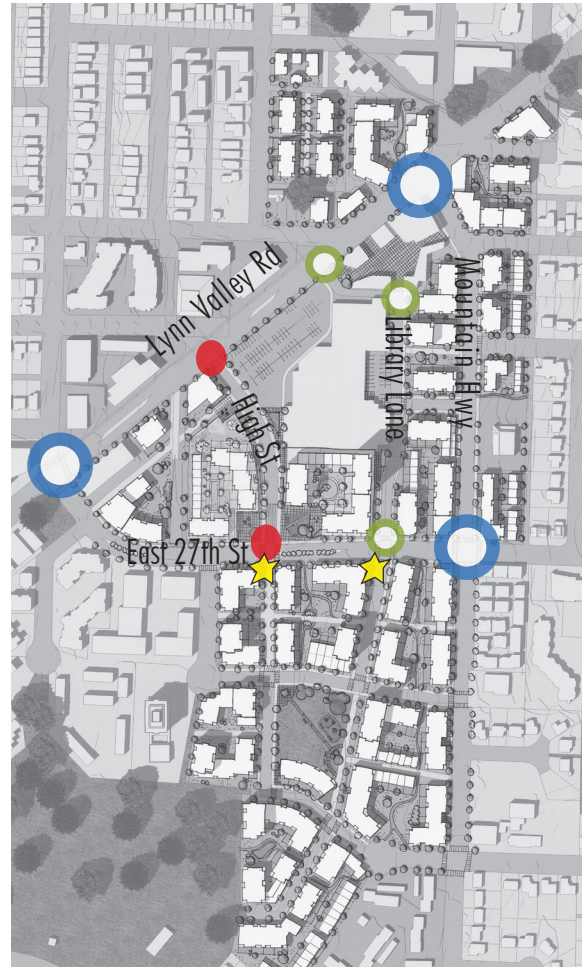
4.1.9 Gateways

Intent: To mark significant street or path entrances to districts or neighbourhoods, to highlight transitions between areas and as opportunities for public art. Gateways should not include signage for commercial uses.





- The design of these urban elements should highlight the Mountain Village theme while allowing for artistic freedom and innovation.
- Upright boulders, set back to avoid conflicts with traffic and/or pedestrians, combined with areas of understorey vegetation, are located between the edge of the Lynn Valley Library and the curb and are recommended as a precedent for gateway design in other Town Centre locations. A variety of boulders combined with signage, lighting, wayfinding elements and public art are recommended, supporting the Mountain Village theme.



gateway elements around the Library include plantings, boulders and a unique bus shelter



Town Centre gateway locations

-  i. Town Centre gateways could include decorative paving inside the intersection combined with other elements consistent with the Mountain Village Theme.
-  ii. High Street gateways should signal an entrance to the commercial/retail/community gathering place zone.
-  iii. Library Lane gateways should highlight linkages to the library and reflect adjacent residential uses.
-  iv. Other gateways between the Town Centre and residential precinct South of East 27th Street should be pedestrian-oriented. Gateways located at pedestrian pathways leading to the nearby parks are encouraged.

4.1.10 Wayfinding

Intent: To provide clear, useful and user friendly graphic information, orient people within the Town Centre, direct them to desired destinations and provide public art opportunities. Wayfinding elements should be consistent within the Town Centre, other public realm signage and graphic elements.

- in addition to providing information, wayfinding elements may also be public art opportunities
- other creative opportunities are encouraged to be incorporated such as local historical and environmental interpretation, storytelling, and, particularly for families with children, invitations to explore, cues to notice and follow, and clues to discover, etc.



an example of using unique paving materials within an intersection, that signals or directs arrival to a particular place

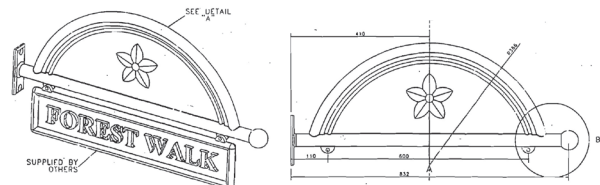


gateways should include natural materials and landscaping and places for people to gather

4.1.11 Signage

Intent: To provide street signage that complements signage already established for Lynn Valley Road, East 27th Street and Mountain Highway and reflects the contemporary style of street furniture in Library Square.

- new street signs should reflect the simple, contemporary design of street furniture, etc. from Library Square.
- painted finishes in black and white are recommended
- dimensions should be complementary to existing DNV standards



example of existing street signs



conceptual design for new street signs



wayfinding combined with public art, street furniture and lighting

4.1.12 Street Lighting

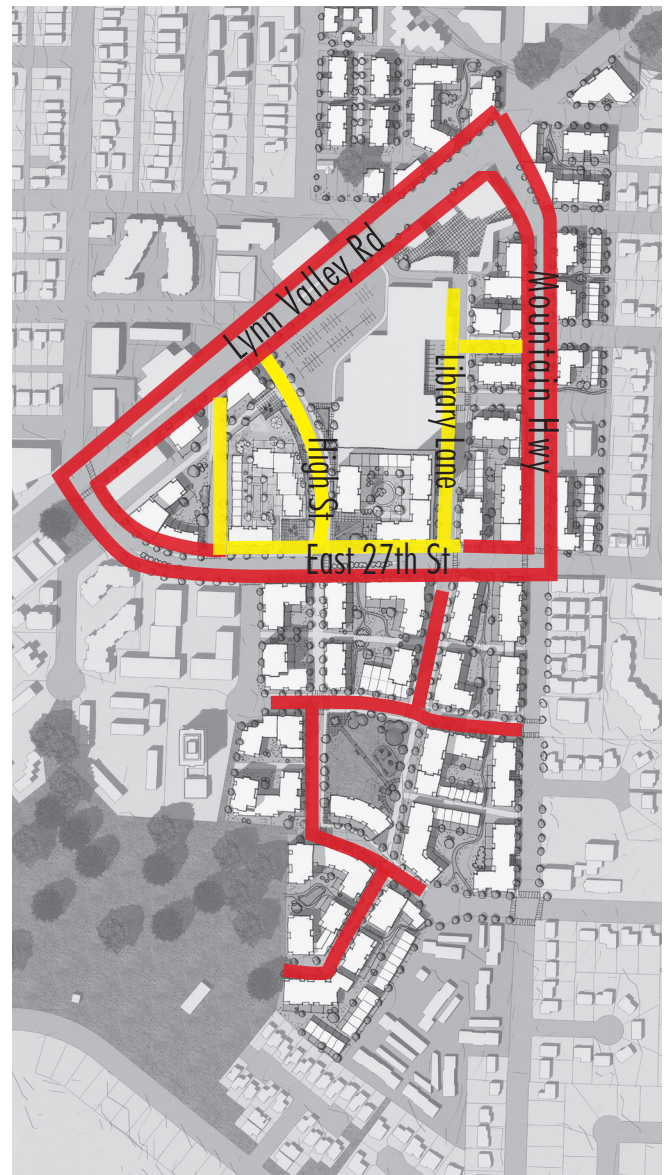
Intent: To provide an appropriate scale, type and level of lighting along traffic and pedestrian routes, complement the existing street lights on Mountain Highway, East 27th Street and Lynn Valley Road and the contemporary style and character of Library Square.

i. Street Lighting Types and Details

- street lighting on new streets, paths, and public realm areas is encouraged to have a unified character, different but related to lighting along those existing streets
- refer to illustrations in appendix 6.3, 6.4, and 6.5 for preferred street lights including pedestrian level lighting
- a black finish with the 44 inch standard base cover is recommended on all Town Centre Core street lights
- Dark Green finish with the BC6 Standard Base Cover is recommended for all streets in the Lynn Valley Town Centre, not including the Town Centre Core streets
- banner brackets are recommended for all street lights on Valley Centre Avenue and Library Lane
- street lights at gateway locations or pedestrian crossings on new local streets should include banner brackets

ii. Light Distribution

- light fixtures should direct appropriate light levels effectively to desired areas, and avoid glare and light spillage to other areas, particularly residential uses and the sky
- light levels should be consistent within areas of similar use, and should avoid creating bright and dark areas
- street lighting should be included on both sides of each street, staggered, and an appropriate mix of pedestrian and street lighting types to meet necessary lighting levels
- fixture types and spacing should be selected to correspond with the scale of area to be lit
- consider including small scale, low level lighting along pedestrian routes, such as under benches, lighting associated with public art, and up-lighting of trees to add to the character and ambiance of pedestrian areas
- all light fixtures should be LED and night sky compliant



street lighting key plan

- Town Centre Core Streets (refer to Section 6.2, 6.3 and 6.4 for lighting specifications)
- Lynn Valley Town Centre streets (refer to Section 6.2 and 6.5 for lighting specifications)

4.2 Rain and Stormwater Management:

Intent: To encourage rain and stormwater management to be both visible and memorable. These elements should incorporate rain and stormwater strategies into the design of streetscapes, landscapes and architectural elements to enhance the public realm and assist in meeting the requirements set out in the Hastings Creek Watershed ISMP.

Stormwater features are encouraged in streetscapes and should be complementary to other sustainability initiatives such as narrowing streets and limiting crossing distances to enable pedestrian and bike movements within street cross-sections. Where constrained street cross-sections may limit the capacity to provide traditional rain gardens, the focus should be on capturing and directing rainwater in underground French drains. Stormwater features are also encouraged between the buildings and the pedestrian movement zone of the sidewalk, primarily in plazas and setbacks around building entries. In plazas, rain gardens may be located:

- below the grade of the plaza, collecting rainwater from surrounding paving and buildings with either gently sloping sides, where space permits, or with urban edges, including curbs or seating elements.
- at or above grade of the plaza, collecting rainwater from the roofs of adjacent buildings.
- Both types can include additional storage for rainwater in underground trench drains or similar holding areas.

Cisterns can also receive rainwater from roofs and store it for use or slow release into the ground or storm sewers.

Appropriate plants for rain gardens are listed in Section 4.3 Street Tree Species and Vegetation.



an example of rainwater management integrated into landscaped areas at the intersection of Lynn Valley Road and Mountain Highway



trench grate with river rock motif

4.3 Street Tree Species and Vegetation

Intent: To provide the best possible conditions for healthy street trees that support the pedestrian nature of the Town Centre and the Mountain Village theme. The District has developed guidelines for street tree planting to ensure that trees can mature in healthy condition. These standards are especially important considering the landscape is a large determinant of the Town Centre character.

A. General Guidelines

- street trees should be located and provided with growing conditions which optimize health and extend their life span
- best practises such as tree wells or continuous planting beds should be provided
- permeable paving or landscaping should ideally be provided adjacent to trees
- Silva Cells or equivalent should be considered in constrained situations over structure etc.
- placement and location of street tree clusters is encouraged to be "natural" or irregular rather than evenly placed
- natural or 'clusters' more reminiscent of forest groupings of trees are encouraged on all new streets within the Town Centre
- recommended locations include gateways, as buffers to parking or refuse collection areas and to mark pedestrian crossings
- landscape lighting should be included
- conifers are recommended where space permits (2.5 m minimum depending on species) and where they do not impede sidewalks or other public spaces

note: large conifers on private property within the front setbacks are encouraged to relate to the landscape on the street and the height of new developments



*examples of informal planting/
boulders*

B. Recommended Plant Species for Informal Groupings on Public Streetscapes

i. Trees

- Acer circinatum / Vine Maple
- Acer griseum/ Paperbark Maple
- Acer glabrum var. douglasii/ Douglas Maple
- Amelanchier x grandiflora 'Autumn Brilliance'/
- Carpinus betulus 'fastigiata' / Fastigate European Hornbeam
- Cornus nuttallii/ Pacific dogwood
- Cercidiphyllum japonicum/ Katsura
- Ginkgo biloba / Ginkgo
- Nyssa sylvatica / Black Gum
- Picea omorika / Serbian Spruce
- Pinus nigra / Black Pine
- Thuja plicata / Western Red Cedar (for natural areas)
- Styax japonica/ Japanese snowbell tree

ii. Shrubs and Groundcover:

- Adiantum pedatum/ Northern maidenhair fern
- Arctostaphylos uva-ursi 'Vancouver Jade'/ Bearberry
- Autumn Brilliance Apple Serviceberry
- Arctostaphylos uva-ursi/ Kinnikinnick, Bearberry
- Asarum caudatum/ Wild ginger
- Blechnum spicant/ Deer fern
- Calluna vulgaris var./ Heather
- Cornus sericea / Red Twig Dogwood
- Echinacea purpurea 'Kim's Knee High'/Dwarf purple coneflower
- Euphorbia myrsinites/ Donkey-Tail Spurge
- Festuca glauca/ Blue fescue
- Gaultheria shallon / Salal
- Hamamelis virginiana / Witchhazel
- Lonicera pileata/ Privet honeysuckle
- Mahonia aquifolium / Oregon Grape
- Mahonia nervosa/ Cascade Oregon grape
- Polystichum munitum / Sword Fern
- Stipa tenuissima/ Mexican feather grass
- Spirea douglasii / Hardhack
- Spirea japonica 'Walburna'/ Magic Carpet spirea

iii. Rain Gardens and Bio-Swales:

Trees

- Acer circinatum/ Vine maple
- Amelanchier alnifolia/ Western serviceberry
- Malus fusca/ Pacific crabapple

Shrubs

- Cornus sericea 'Kelseyi'/ Dwarf redbud
- Holodiscus discolor/ Oceanspray
- Rubus parviflorus/ Thimbleberry
- Myrica californica/ Pacific wax myrtle
- Physocarpus capitatus /Pacific ninebark

Grasses, Ferns + Groundcover

- Asarum caudatum/ Wild ginger
- Aster chilensis/ Common California aster
- Carex obnupta/ Slough sedge
- Eleocharis palustris/ Spike rush
- Eriophorum angustifolium/ Common cottongrass
- Isoetes histrix/ Land quillwort
- Typha minima/ Dwarf cattail
- Juncus effusus var. pacificus/ Common Rush
- Juncus tenuis/ Slender rush
- Athyrium filix-femina/ Lady fern
- Osmunda cinnamomea/ Cinnamon fern
- Osmunda regalis/ Royal fern
- Polystichum munitum/ Sword fern

Dry area of Garden (higher banks)

- Achillea millefolium / Yarrow
- Arbutus unedo 'Compacta'/ Strawberry Tree
- Echinacea purpurea/ Purple coneflower
- Ribes sanguineum/ red-flowering currant
- Wahlenbergia communis/ Tufted bluebell

**This list includes full sun and shade tolerant plants. Further investigation of species is required for appropriate plant selection.*



Hamamelis virginiana / Witchhazel

C. Recommended Plant Species for Informal Groupings on Private Property and Parks

i. Trees (Large)

- *Acer macrophyllum* / Big Leaf Maple
- *Carpinus betulus* 'fastigiata' / Fastigiate
- European Hornbeam
- *Cercidiphyllum japonicum*/ Katsura
- *Cornus* 'Eddie's White Wonder'/ Dogwood 'Eddie's White Wonder'
- *Ginkgo biloba* / Ginkgo
- *Nyssa sylvatica* / Black Gum
- *Pseudotsuga menziesii* / Douglas Fir
- *Thuja plicata* / Western Red Cedar

ii. Trees (Medium)

- *Abies lasiocarpa*/ Subalpine fir
- *Acer circinatum* / Vine Maple
- *Acer griseum*/ Paperbark Maple
- *Acer glabrum* var. *douglasii*/ Douglas Maple
- *Betula platyphylla* var. *japonica* 'Whitespire'/ Whitespire Japanese white birch
- *Chamaecyparis nootkatensis* 'Green Arrow'/ Weeping Alaskan Yellow Cedar
- *Davidia involucrate*/ Dove Tree
- *Parrotia persica* / Parrotia
- *Picea omorika* 'Pendula Bruns'
- *Picea glauca* 'Pendula'
- *Pinus sylvestris* 'Fastigiata'/ Scotch pine
- *Populus tremula* 'Erecta'/ Columnar European aspen
- *Stewartia pseudocamellia*/ Japanese stewartia

iii. Shrubs and Groundcover

shrubs and groundcover from 4.3.B.ii may be included as well as the following:

- *Imperata cylindrical* 'Rubra'/ Japanese blood grass
- *Chamaecyparis obtuse* 'Nana Lutea'/ Golden Dwarf Hinoki Cypress
- *Liriope muscari*/ Lily turf
- *Pennisetum alopecuroides*/ Fountain grass
- *Santolia chamaecyparissus*/ lavender cotton
- *Sedum* 'Autumn Joy'/Autumn Joy Stonecrop
- *Taxus x media* 'densiformis'/ Yew



Acer macrophyllum / Big Leaf Maple



Imperata cylindrical 'Rubra'/ Japanese bloodgrass

5.0 BUILDING DESIGN GUIDELINES

5.0 BUILDING DESIGN GUIDELINES

Guidelines for all development forms are divided into the following sections:

Section 5.1: Guidelines common to all building forms

Section 5.2: Guidelines for Commercial and Mixed-Use Development (refer to 4.3 and 4.4 for residential portions)

Section 5.3: Guidelines common to all residential developments

Section 5.4: Guidelines for Medium Density multi-family developments

Section 5.5: Guidelines for Low Density ground-oriented developments up to 3 storeys

5.1 General Guidelines, Part 5

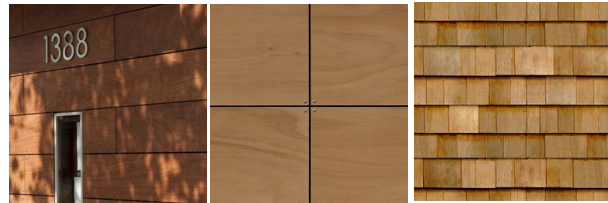
(replaces OCP Schedule B Guideline: A3.7 Building Materials and Transitions and A3.8 Colours and Finishes)

Intent: The form and character of Town Centre developments should support the Mountain Village theme and incorporate elements that extend the natural North Shore environment. Natural building materials, an earth toned colour palette and landscaping integrated into the building forms are strongly recommended.

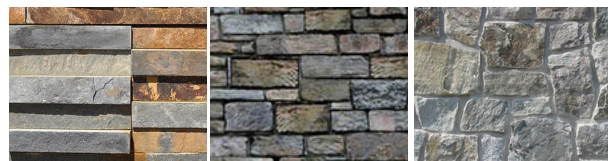
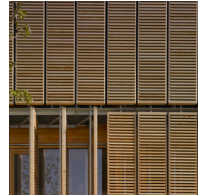
5.1.1 Building Materials

Intent: Building elevations emphasizing one or two natural building materials, in addition to glazing, are strongly encouraged. Accent materials providing colour, interest and contrast to the overall building design are encouraged. Well crafted, durable materials that support sustainability and Town Centre themes are expected throughout.

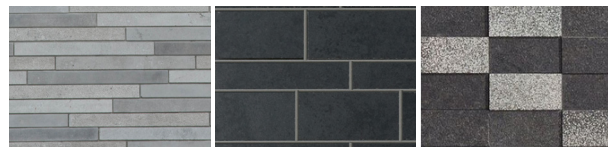
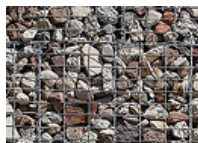
- natural building materials including wood, stone, concrete and brick should dominate the expression on lower floors and along the streetwall including retaining and garden walls
- materials on upper floors are expected to be consistent with the quality, durability and



wood products



natural stone



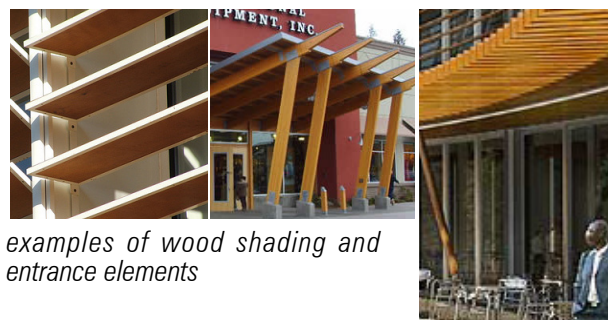
grey brick



concrete, textured concrete and concrete block



accent materials including tile and glazing



examples of wood shading and entrance elements

craftsmanship of the lower levels

- accent materials including ceramic tile or glazed brick and coloured glass and spandrel panels are recommended for their durability and wide range of colour choices
- functional screens, shading devices and other passive solar design elements that complement the architecture are highly recommended
- heavy timber and engineered wood elements especially along the base of the building and at entrances are strongly encouraged
- wood elements should be protected from weathering using best building practices and appropriate finishes that preserve the natural colour and texture
- colours should be chosen to complement the palette of natural stone and wood: tones of grey are considered most appropriate
- the use of red brick is discouraged
- soffit materials should be consistent with the building's overall durability and quality - vinyl and perforated materials are discouraged
- wood soffits are preferred where feasible

- clear vision glass is preferred over tinted products
- material transitions should avoid a "wallpaper" look
- the use of vinyl or aluminum siding or other materials made to imitate natural finishes is discouraged
- the level of design quality required for streetscape elements should be maintained for all sides of buildings and in site design

5.1.2 Building Colours

- the primary colour palette within the Town Centre should reflect the local mountain and forest environment.
- brighter, complementary accent colours to offset low winter light levels and increase visual interest should be considered

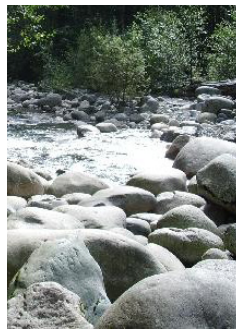
Preferred Colour Palette



forest colours



accent colour examples



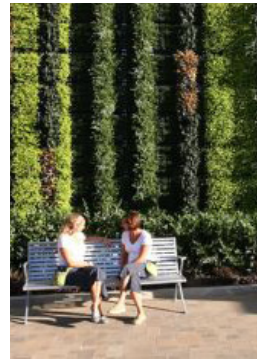
stone colours



5.1.3 Rainwater Design Elements

Intent: To encourage an understanding of rainwater management through visible queues and integration into components of the public realm

- visible integration of rainwater management into the building design is an important objective
- integration of landscaping including green walls, green roofs and landscaped roof terraces into the building design is strongly supported
- innovative methods of directing rainwater from roofs and canopies to street level landscaped areas including rain gardens is encouraged
- public art that is integrated with and designed to make visible rainwater management strategies is encouraged
- refer to Section 4.2 for stormwater management guidelines



green walls and green roofs support rainwater management



building design should integrate rainwater collection and storage

5.1.4 View Corridors

Intent: to retain key public vistas to the mountains from public spaces and streets.

- protect key public mountain views defined by view corridors (refer to adjacent location map) and at street ends
- incorporating a 2-3 storey streetwall height, where possible, sloped roof lines on low-rise buildings and smaller, terraced upper floors of mid-rise buildings are strategies to optimize views
- developments located on view corridors should provide a view analysis to determine optimal street wall height to protect views



key public view corridors

5.1.5 Variation in Building Design

(replaces OCP Schedule B Guideline, Part 5: B 3.1 Variation in Building Design)

Intent: The identity and character of individual buildings should support the Mountain Village theme while contributing interest and variation to streetscapes

- individual buildings within a development and developments adjacent to each other are expected to provide adequate variation in form, materials



recommended mixed use streetwall heights and step backs

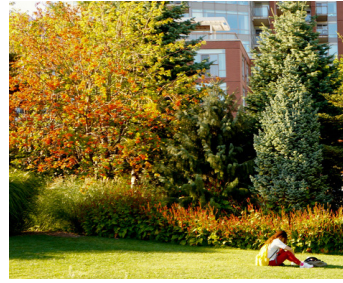
and colour to avoid repetitive, monotonous streetscapes

- design variation as a response to solar orientation is strongly encouraged

5.1.6 Landscape Design

Intent: To encourage an authentic and sustainable landscape throughout the Town Centre that clearly reflects and responds to Lynn Valley's unique mountain setting and local climate.

- incorporate native plants and materials in an "informal", randomly grouped or unstructured manner
- combine tree clusters (including conifers where appropriate, especially in relation to higher buildings), native North Shore shrubs and ground cover species to provide a transition in scale
- provide off leash areas on private developments and where space is prohibitive, dog relief areas are required
- screen views of refuse/recycling and other less attractive architectural elements with plants, trellises or other garden structures
- incorporate green walls as landscape features or to enhance blank walls wherever possible
- incorporate green roofs where possible to manage rainwater, provide useable outdoor space, including opportunities for gathering, play and urban agriculture, enhance views from higher building forms, and/or provide breaks along the streetwall



clusters of local plants and materials including boulders and tall conifers are preferred landscape materials



green walls and other landscaping opportunities are recommended at breaks in the streetwall



shopfront design variety, changes in plane, materials and roof line all provide breaks in the streetwall

5.2 Commercial and Mixed Use Buildings

Intent: To create a high quality pedestrian oriented shopping environment with varied and interesting store fronts, street wall setbacks, wide sidewalks and weather protection

5.2.1 Streetwall Height (Building height facing the street)

(in addition to OCP Schedule B Guideline, Part 5: A1.8 Enclosure)

- a 2-3 storey streetwall height is recommended
- a 2.4 m minimum step back is recommended where possible for storeys above the streetwall to encourage opportunities for terraces and landscaping

5.2.2 Residential Uses

- refer to 5.3.1 Residential Setback Treatments, 5.3.2 Ground-Oriented Units and 5.4.3 Setbacks for detailed design guidelines for residential portions of mixed use buildings

5.2.3 Breaks in the Streetwall

(refer to OCP Schedule B, Part 5, Guideline: A1.10 Breaks in the Streetwall)

- buildings exceeding 45 m long should provide a significant architectural break in the street façade to diminish the visual impact of excessive length
- gaps between sections of overhead weather protection including awnings and canopies should be coordinated with visual breaks in the street façade
- entrances to residential lobbies are opportunities to create breaks in the streetwall through increased setbacks, unique canopies or awnings, a graphic approach to the design of the address and specialized lighting and landscaping
- building breaks that provide opportunities for landscaping are encouraged including planting conifers where appropriate



shopfronts that include heavy timbers and rainwater collection systems support the Mountain Village theme



high quality materials, transparent shopfronts, attractive and individual signage and landscape treatments all support economic activity and a walkable community



the quality and character of the street is enhanced through careful attention to the design of entrances, landscaping, awnings and lighting

5.2.4 Storefronts

(in addition to OCP Schedule B, Part 5 Guideline: A1.11 Storefronts)

Intent: diversity, variety and designs that recognize the human scale are expected on mixed-use streetscapes. Larger commercial spaces with extended frontages are expected to provide active uses along the street including views into shop interiors

i. General Storefront Guidelines

- to provide variety and interest, larger outlets should incorporate smaller shops with their own entries and identities into commercial frontages
- a rhythm of storefront widths from 5.0 to 10.0 m is expected
- small outlets at a scale appropriate for kiosk or incubator businesses are encouraged to enliven the streetwall and provide opportunities for small businesses within the Town Centre
- a minimum of 50% of the entire retail frontage should be comprised of smaller shops
- shop entrances recessed into the building face are recommended to maximize opportunities for glazing, signage and retail display space along the streetwall

ii. Materials and Proportions

- areas of shopfront glazing should maximize views into interiors and opportunities for retail display at the pedestrian level
- 4.0 m minimum dimension for ground level floor to floor heights is recommended
- shopfront exteriors should be constructed of high quality materials that are durable, resistant to graffiti, complement the overall appearance of the building and are compatible with adjacent shopfronts
- including narrow frontages into retail and commercial streetscapes encourages diversity, variety and an enhanced pedestrian experience

iii. Entrances

- shopfront entrances should be focal points on commercial streetscapes

iv. Awnings and Canopies

- awnings and canopies are important opportunities for signage, colour and weather protection and variation along the street
- the size, colour and overall design of awnings on multiple-storefront buildings should balance variety and diversity with the benefits of a unified streetfront
- awnings and canopies should provide weather protection that is as continuous as possible
- canopies, awnings or overhangs should emphasize individual shopfronts
- gaps between awnings or canopies should generally be a maximum of 1.0 m and align with architectural breaks

v. Landscaping/Street Furniture

- planters, window boxes and/or seating integrated into commercial exteriors reinforce the human scale and support variety

5.2.5 Setbacks

(In addition to OCP Schedule B, Part 5 Guideline: A3.3 Setbacks)

- a min 1.0 m setback from property line on the ground floor is recommended to accommodate retail displays and seating
- refer to 5.3.1 for residential setback guidelines



seating and retail displays are accommodated within the commercial setback zone

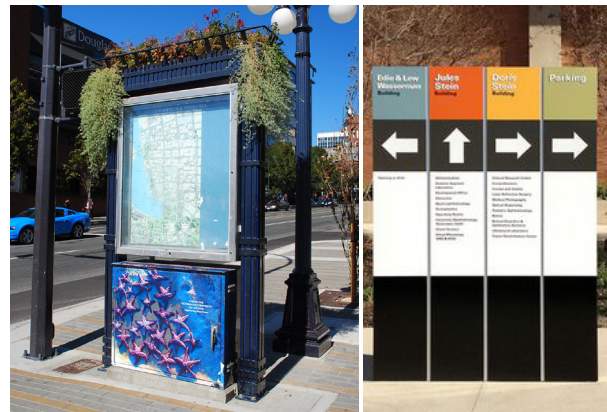
5.2.6 Signage and Lighting

(replaces OCP Schedule B, Part 5 Guideline: A3.16 Signage and Lighting)

- signs and lighting should contribute to the Town Centre as a walkable, pedestrian-oriented development
- pedestrian-oriented signs are preferred including: overhead hanging signs perpendicular to the shopfront, painted window signs, signage incorporated into awnings or canopies
- shop signs and lighting that are well crafted are encouraged
- larger commercial outlets with extended frontages are expected to incorporate variation in signage along the street
- signs should be unique and complement the style, composition, materials, colours and details of the building
- generally, overhead signs should not extend above the first storey or conflict with design details, windows or cornices
- window signs and graphics should complement and enhance the shopfront design and support walkability by not restricting views into shop interiors
- light fixtures should be located to enhance the building design
- larger format retail outlets should include pedestrian-oriented signs along Valley Centre Avenue
- freestanding commercial signs should incorporate natural materials including stone, wood (including heavy timber) ceramic glazed tiles and masonry and be as sensitively illuminated as reasonable
- car-oriented signs including large backlit plastic signs should be avoided
- exterior lighting on mixed use streets should illuminate façades, entrances and signage and provide adequate light level for personal safety
- exterior lights should not produce glare onto streets, public ways or adjacent properties
- lighting fixture design should complement the building façades.



providing opportunities for innovative signs on the commercial streetscape



examples of free standing signs



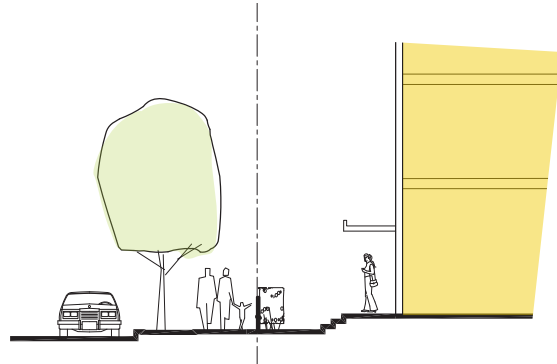
well designed exterior lighting improves the streetscape and enhances the shopfront

5.3 General Residential Building Design Guidelines

Intent: Designers are encouraged to consider pedestrian oriented residential developments that are diverse in colour and form and reflect the mountain village theme

5.3.1 Residential Setback Treatments

- setting back residential buildings from the property lines provides new developments a degree of privacy and a landscaping opportunity, similar to existing residential patterns
- hedges, garden walls, pathways, lighting and addresses or other residential indicators are encouraged to mark the transition from the public to semi-public or private realm



raised front stoops and weather protection are recommended at ground level units

5.3.2 Ground-oriented Units

- street oriented ground level residential units are encouraged in all residential development forms with front doors, gardens, gates, and pathways oriented to the sidewalk where possible, to increase livability and enhance the streetscape
- ground-oriented units accessed from a courtyard should be visible from the street where possible
- strategies to maximize daylighting and livability including generous areas of glazing and high floor to ceiling heights are encouraged
- the interface between public and private properties should be treated with high quality materials and architectural finishes



garden gates, pathways, lighting and addresses enhance residential property edges

5.4 Medium Density Multi-Family

Intent: Designers are encouraged to consider how new and existing future mid-rise and tall buildings relate to each other and to the backdrop of the North Shore mountains

5.4.1 Setbacks

(replaces OCP Schedule B, Part 5 Guideline: B3.5 Setbacks and B 2.6 Building Setback to the Street)

- residential uses should be setback minimum 4.0 m from the property line
- setting back the garden wall, hedges and gates 0.6 m from the property line is encouraged to provide an opportunity for grade transitions and landscaping
- refer to 4.2.1 Streetwall Height for upper level step backs

5.4.2 Building Form including Roofs

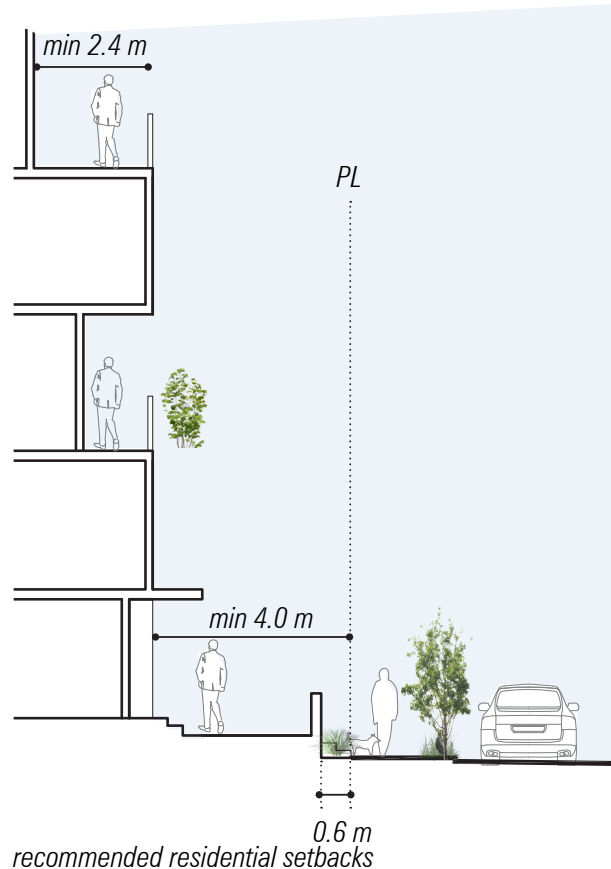
(replaces OCP Schedule B, Part 5 Guideline: B4.9 Articulation of the Building and B4.10 Sculpting the Top of the Tower)

a. Buildings Up to 5 Storeys

- simple, purposeful roof forms are preferred

b. Buildings Higher than 5 Storeys

- Encourage variety and innovation in building form - encourage distinctive and innovative architecture that differentiates between developments and also differentiates buildings within larger developments.
- stepping back upper levels is encouraged to reduce bulk and shadowing and to enhance livability by incorporating upper terraces and roof gardens
- upper levels, including rooftops incorporating architectural elements such as trellises, arbours or other shading or privacy elements in materials and colours to support the Mountain Village theme are encouraged



5.5 Low Density and Ground-Oriented Multi-Family (up to 3 storeys)

Intent: Designs for townhouses or rowhouses that provide a transition in density between the Town Centre and existing buildings up to 3 storeys single family residential neighbourhoods.

These attached residential forms should support the Mountain Village theme through their form and character including colour, materials and setback treatment.

Roof forms should be simple - either contemporary shed or flat roofs or more traditional steep pitched gable roofs

5.5.1 Height, Massing and Variation

(replaces OCP Schedule B, Part 5 Guideline: C1.1 Height and Massing)

- building height should be maximum three storeys
- portions of buildings adjacent to lower existing houses should transition towards the height of those houses
- massing should reflect the rhythm of individual dwelling units, with an emphasis on vertical proportions.
- stepped building forms, bay windows and recessed areas are encouraged
- variations of massing, dwelling unit types, materials and colour, within a unifying design theme, will contribute to a contemporary Mountain Village theme
- buildings consisting of small groups of dwelling units are encouraged
- long rows of repetitive identical units should be avoided

5.5.2 Roof Treatment

(replaces OCP Schedule B, Part 5 Guideline: C1.2 Roof Treatment)

- roofs should relate to and emphasize individual dwelling units

- wide overhangs should be provided
- generous roof canopies over entries are encouraged to provide weather protection and identify unit entries
- use of generously proportioned solid wood fascia, trim and bracket elements contributes to the intended mountain character of buildings
- exploration of green roofs is encouraged



examples of simple roof forms, articulated elevations, landscaped setbacks and individual unit identity

5.5.3 Rear Yard Setbacks

(replaces OCP Schedule B, Part 5 Guideline: C2.8 Rear Yard Setbacks)

- where units back onto walkways, lanes or public open spaces, a minimum 6.0 m setback should be provided for fenced or screened private open space with consideration to vary for L or U-shaped buildings
- some variation is encouraged in setback, and in dwelling unit rear elevation design, to avoid creating a visual wall

5.5.4 Pedestrian Access

(replaces OCP Schedule B, Part 5 Guideline: C2.10 Pedestrian Access)

- street fronting units are preferred, with individual walkways between unit entries and sidewalks
- entries from common courtyards are preferred to entries off parking areas or lanes, unless the lane is developed as a greenway
- unit entries should ideally be visible from well used public property - particularly where entries are off private courtyards
- CPTED best practises should be provided
- Refer to Accessible Design Policy

5.5.5 Rainwater Management

- rainwater should be infiltrated optimally into the ground at each development site
- the rainwater management strategy is encouraged to be made visible, and placement and design of gutters, rain water leaders, chains, splash blocks, rain barrels, etc. should be carefully considered
- integrating rainwater management elements into the design should reinforce the identity of individual dwelling units
- simple profiles and geometries of gutters and rain water leaders, and use of durable materials, should contribute to the Mountain Village character
- see also section 4.2 Rain and Stormwater Management

5.5.6 Cladding

(replaces OCP Schedule B, Part 5 Guideline: C3.3 Cladding)

- use of natural materials such as wood siding and shingles, stone, and brick is encouraged and should dominate the building expression, especially facing the street, public open spaces and at ground floor elevations
- stone dash stucco is preferred to smooth trowelled stucco
- textured stucco should be avoided
- manufactured panels, planks and shingles, should be well crafted and durable
- trim should be wood, generally nominal 2" thick, in generous widths to contribute to the Mountain Village character



design elements that manage rainwater are encouraged

6.0 APPENDIX

6.0 Existing Relevant Policies

Schedule B: Development Permit Areas of the Official Community Plan Bylaw 7900 includes a series of Form and Character Design Guidelines that apply to all commercial, industrial and multi-family development in the District, including the Lynn Valley Town Centre. Design elements from these OCP guidelines, though not repeated in this Lynn Valley Town Centre Public Realm and Design Guidelines, still apply. Where identified, the Lynn Valley Town Centre Public Realm and Design Guidelines offers additional design measures to provide clarity or further detail to the OCP design guidelines towards achieving the Mountain Village character and vision for the Lynn Valley Town Centre. In limited cases, where identified, the design measures in the Lynn Valley Town Centre Public Realm and Design Guidelines replace those provided in the OCP Design Guidelines. See below for details.

a. DNV OCP, Schedule B, Part 5: Guidelines for Commercial and Mixed-Use Buildings

Lynn Valley Town Centre Public Realm and Design Guidelines offer revisions to the following sections:

- A 1.8: Enclosure** - revised and expanded
- A 1.10 Breaks in the Streetwall** - revised and expanded
- A 1.11 Storefronts** - revised and expanded
- A 2.10 Rainwater Management** - added
- A 2.11 View Corridors** - added
- A 3.1 Variation in Building Design** - revised and expanded
- A 3.3 Setbacks** - revised and expanded
- A 3.7 Building Materials and Transitions** - incorporated into General Building Design Guidelines
- A 3.8 Colours and Finishes** - incorporated into General Building Design Guidelines
- A 3.11 Balconies** - revised
- A 3.16 Signage and Lighting** - revised and expanded

b. DNV OCP, Schedule B, Part 5: Guidelines for Multi-Family Housing

Lynn Valley Town Centre Public Realm and Design Guidelines offer revisions to the following sections:

General Residential Building Design Guidelines

- B 2.6 Building Setbacks to the Street** - revised and expanded
- B 3.1 Variation in Building Design** - revised and expanded
- B 3.5 Setbacks**
- B 3.8 Building Materials and Transitions** - revised and expanded
- B 3.15 Balconies** - replaced
- B 4.2 Maximum Building Frontage** - replaced
- B 4.5 Maximum Building Footprint** - replaced
- B 4.9 Articulation of the Building** - revised and expanded
- B 4.10 Sculpting the Top of the Tower** - revised and expanded
- B 4.11 Balconies** - deleted

c. DNV OCP, Schedule B, Part 5: Guidelines for Ground-Oriented Housing

Lynn Valley Town Centre Public Realm and Design Guidelines offer revisions to the following sections:

- C 1.1 Height and Massing** - revised and expanded
- C 1.2 Roof Treatment** - revised and expanded
- C 2.8 Rear Yard Setbacks** - revised and expanded
- C 2.9 Side Yard Setbacks** - revised and expanded
- C 2.10 Pedestrian Access** - revised and expanded
- C 3.2 Variations in Design** - revised and expanded
- C 3.3 Cladding** - revised and expanded
- C 3.4 Varied Roof lines** - revised and expanded

6.1 Supplementary Paving Specifications

See also Development Servicing Bylaw 7388: Water, sanitarysewer and stormwater standards and the MMCD Supplementary Specifications and Standard Drawings

01. Specification

- Specified minimum 28 day compressive strength: 32 mpa
- Air entrainment: 6 to 9%
- Slump: +/- 80mm
- Maximum aggregate size: 19mm
- Minimum cement content: 335 kg/cubic meter
- Chilliwack Stone is to be used. The supplier and reference number should be included on the drawing notes. The concrete sub-contractor would need to make provisions to modify the mix to incorporate this aggregate.
- Exposed aggregate finishing takes place after the initial set and is achieved using a gentle wash with water and brush until the desired aggregate exposure is achieved. The slab must then be allowed to cure for at least 7 days. It should then be dried, cleaned and a concrete sealer should be placed on the surface to finish the installation.
- The Developer and Contractor must control siltation during this entire operation, but especially during the washing. The fine cement slurry must be prevented from entering the drainage system, by use of silt dams, CB filter cloth bags or barriers or other approved methods. This is very important and the Owner will be held responsible for any system contamination or other Environmental impact that occurs as a result of his operation.

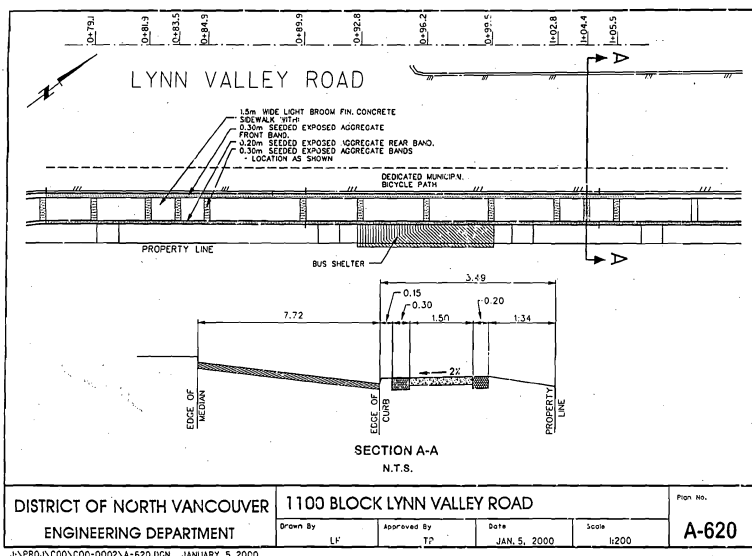


Figure 1: sidewalk construction detail

- Approval for the final specification is required from the General Manager of Engineering of the District of North Vancouver.

02. Locations

- The sidewalk must comprise a minimum 1.5m-wide standard broom finish concrete sidewalk and exposed aggregate banding, in accordance with paving specifications as set out in Figure 1 and in the locations as set out in (b), as per the sidewalk detail shown in Figure 2.
- In conjunction with the sidewalks, exposed aggregate banding must be provided as follows:
 - one 0.3m-wide exposed aggregate band directly adjacent to and parallel to the sidewalk at the front of the sidewalk (curb side);
 - one 0.2m-wide exposed aggregate band directly adjacent to and parallel to the sidewalk at the rear of the sidewalk (property side); and
 - several 0.3m-wide exposed aggregate cross bands perpendicular to the bands set out above, in a pattern using a 1.2m module, with the pattern to be made up of multiples of the basic module ranging from 1.2m to 4.88m in random combinations.

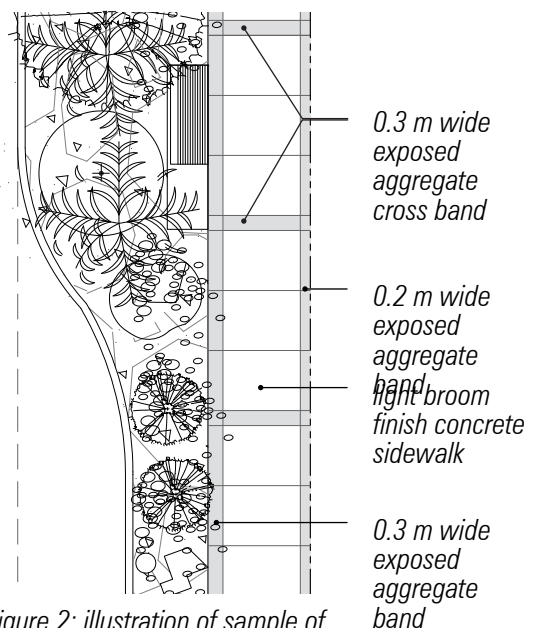


Figure 2: illustration of sample of aggregate banding

6.2 Town Centre Core Lighting Standards

(not including Town Centre Core Streets as per Section 6.2)

Specifications on the pedestrian luminaires, decorative poles, banner arms and decorative signage arms are listed below.

Pedestrian Luminaire:

Lumec Domus 30 series consisting of the following:

- 70 watt HPS ballast assembly, 120 volt, medium base socket.
- SE3D type 3 recessed optical system with house side cutoff shield, type 5 distribution pattern is available if required.
- Luminous ring option to be installed on Domus 30.
- Drop clear polycarbonate lens to be mounted to frame, which houses the tempered glass lens.
- 1F1A shephard hook mounting arm. This arm can be installed on both pedestrian decorative poles and decorative roadway poles.
- Luminaire and mounting arm will be finished in Frances Andrews #RAL 1011: Butter-scotch powder coat paint finish.

Decorative Poles:

Pedestrian:

Manufactured by Westcoast Engineering.

Decorative poles consist of the following:

- 4400mm tapered octagonal pole to meet District of North Vancouver standards.
- Pole will be drilled and tapered to accept Lumec's 1F1A mounting arm. Pole and mounting arm to be finished in a GN8TX dark green powder coat.
- Two piece cast aluminum decorative base with a transition ring which will wrap around the tapered octagonal pole. The decorative cast base shall include a dogwood flower

mounted with the middle of the casting, the name Lynn Valley on the upper part of the casting, and D.N.V. on the lower part of the casting. The decorative casting will be finished in a combination dark green and butterscotch powder coat finish.

- Electrical outlets are to be installed on each pole.

Roadway:

Westcoast Engineering decorative streetlight poles consisting of the following:

- 7900mm tapered octagonal pole to meet the District of North Vancouver standards, finished in a GN8TX dark green powder coat finish.
- The standard octagonal pole, both new and existing, will be adapted to accept a pedestrian luminaire and two-piece cast aluminum base. Banner brackets and pipes shall be Globe Foundries Ltd. No. BB100 or approved alternate.
- Two piece decorative base design shall be the same style as described in the decorative pedestrian pole section.
- Electrical outlets are to be installed on each pole.

Decorative Signage:

Westcoast Engineering Decorative sign arm consisting of the following:

- 25mm diameter round steel pipe approximately 905mm long.
- The end of the 25mm pipe to be finished with a 50mm diameter cast aluminum ball.
- Upper half circle casting illustrating a dogwood flower will be mounted to the top of the 25mm round arm.
- The lower street sign will be supplied by others.

The decorative signage arm will be attached to the pole with a coupler. The coupler will be welded to the pole, the 25mm arm will slide inside the coupler and three tamper proof screws will hold the arm in place.

6.3 Town Centre Core Lighting Specifications

Beta Pendant

selux

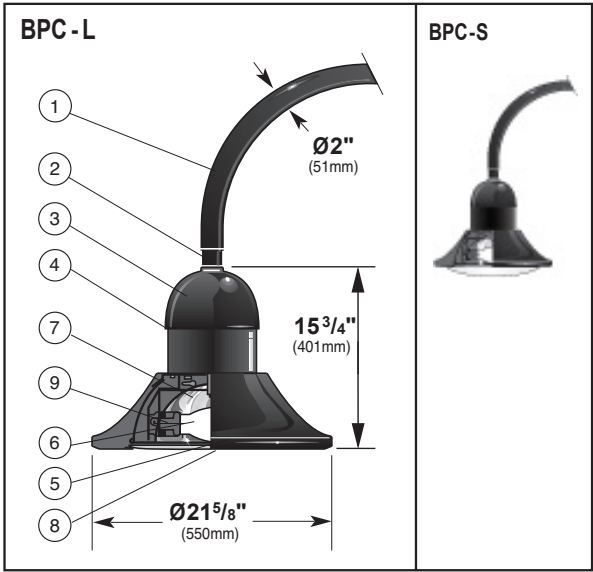


Project: _____

Type: _____ Qty: _____

| | | | | | | | |
|-------------|--------|-----------|--------------|---------|--------|---------|---------|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Series | Optics | Reflector | Mounting | Lamping | Finish | Voltage | Options |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Pole Series | Height | Finish | Pole Options | | | | |

| Series | Optics | Reflector | Mounting | Lamping | | Finish | Voltage | Options |
|---|---------------------|--------------------------------|-------------------|---------------------------------------|------------------------------|--------------------------|-------------------------------|------------------------------|
| BPC Beta Pendant | L Flat Glass Lens | R2 Type II Aluminum Reflector | 1 Single | Metal Halide H050 ¹ 50w | HPS S050 ¹ 50w | WH White | 120 | HS House Side |
| | S Sagged Glass Lens | R3 Type III Aluminum Reflector | 2C Double Cluster | H070 70w | S070 70w | BK Black | 208 | Shield |
| | | | 3C Triple Cluster | H070 70w | S070 70w | BZ Bronze | 240 | QR Quartz Restrike (40w Max) |
| | | 4C Quadruple Cluster | H100 100w | S100 100w | SV Silver | 277 | FS ¹ Single Fusing | |
| | | R5 Type V Aluminum Reflector | W Wall Mount | H150 150w | S150 ² 150w | SP Specify Premium Color | 347 | PCT Photocell Tenon |
| | | | P Pendant | | | | | |
| ¹Not available for 347v ²Only for 55v lamp | | | | | | | | |



- 1. Mounting Arm** - Ø2" (51mm) curved arm attaches to pole by means of a transition fitter supplied with fixture.

2. Fixture Connection - The fixture cap is securely fastened to curved arm using a steel connector.
- 3. Fixture Cap** - Decorative fixture cap; removable to provide easy access to ballast.

4. Gasketing - Continuous molded gaskets provide weather-proofing, dust, and insect control.

- 5. Fixture Hood** - Decorative aluminum shade.
- 6. Lamp** - One clear, ED17 metal halide or high pressure sodium up to 150w. Horizontal lamp for R2 and R3 reflectors; base-up vertical lamp for R5 reflector. Lamp provided by others.
- 7. Reflector** - Precision formed aluminum reflector available with a Type II, III, or V distribution.
- 8. Shielding** - Specify tempered flat glass lens (L), or tempered sagged glass lens (S). Lenses are secured using a captive ring and are easily removable for access to lamp (no special tools required). Version with tempered Glass Lens (BPC-L) is IDA-Approved™ dark sky friendly.
- 9. Socket** - 4KV Pulse rated porcelain medium base socket pre-wired to ballast at factory.
- 10. Ballast** - (Not shown) A high efficiency, pulse start, core and coil ballast regulates voltage for H.I.D. lamp. Consult factory for detailed ballast information.
- Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.
- Standard exterior colors are White (WH), Black (BK), Bronze (BZ) and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide. Hot Dip Galvanized finish (GV) on all steel parts also available.

Preferred Street
Lighting
Manufacturer:
Selux
Model: Beta

6.4 Town Centre Core Lighting Specifications: For Pedestrian pathways

Beta Lantern

selux



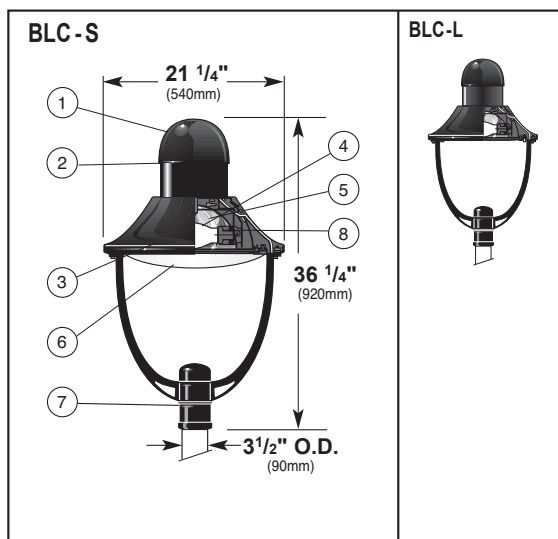
Project: _____

Type: _____ **Qty:** _____

Series - Optics - Reflector - Mounting - Lamping - Finish - Voltage - Options

Pole Series - Height - Finish - Pole Options

| Series | Optics | Reflector | Mounting | Lamping | Finish | Voltage | Options |
|----------------------------|----------------------------|---------------------------------------|---------------------|--|---------------------------------|------------|-------------------------------------|
| BLC Beta Lantern | L Flat Glass Lens | R2 Type II Aluminum Reflector | 1 Single | <u>Metal Halide</u> | WH White | 120 | HS House Side Shield |
| | S Sagged Glass Lens | R3 Type III Aluminum Reflector | 2 Double | H050¹ 50w | BK Black | 208 | QR Quartz Restrike (40w Max) |
| | | R5 Type V Aluminum Reflector | W Wall Mount | H070 70w | BZ Bronze | 240 | FS¹ Single Fusing |
| | | | | H100 100w | SV Silver | 277 | PCT Photocell Tenon |
| | | | | H150 150w | SP Specify Premium Color | 347 | |
| | | | | <u>HPS</u> | | | |
| | | | | S050¹ 50w | | | |
| | | | | S070 70w | | | |
| | | | | S100 100w | | | |
| | | | | S150² 150w | | | |
| | | | | ¹ Not available for 347V ² Only for 55v lamp | | | |



1. Fixture Cap - Decorative aluminum fixture cap removable for ballast access.

2. Gasketing - Continuous molded gaskets provide weatherproofing, dust, and insect control.

3. Fixture Hood - Decorative aluminum shade with hinged door for lamp access (no special tools required).

4. Lamp - One clear, ED-17 metal halide or high pressure sodium up to 150w. Horizontal lamp for R2 and R3 reflectors; base-up vertical lamp for R5 reflector. Lamp provided by others.

5. Reflector - Precision formed aluminum reflector available with a Type II, III, or V distribution.

6. Shielding - Specify tempered flat glass lens (L), or tempered sagged glass lens (S). Lenses are secured using a captive ring and are easily removable for access to lamp (no special tools required). Version with tempered Glass Lens (BLC-L) is IDA-Approved™ dark sky friendly.

7. Pole Fitter - Cast aluminum fitter secures to pole with 3 stainless steel Allen head set screws. For 3 1/2" (90mm) pole tenon.

8. Socket - 4KV Pulse rated porcelain medium base socket pre-wired to ballast at factory.

9. Ballast - (Not shown) A high efficiency, pulse start, core and coil ballast regulates voltage for H.I.D. lamp. Consult factory for detailed ballast information.

Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

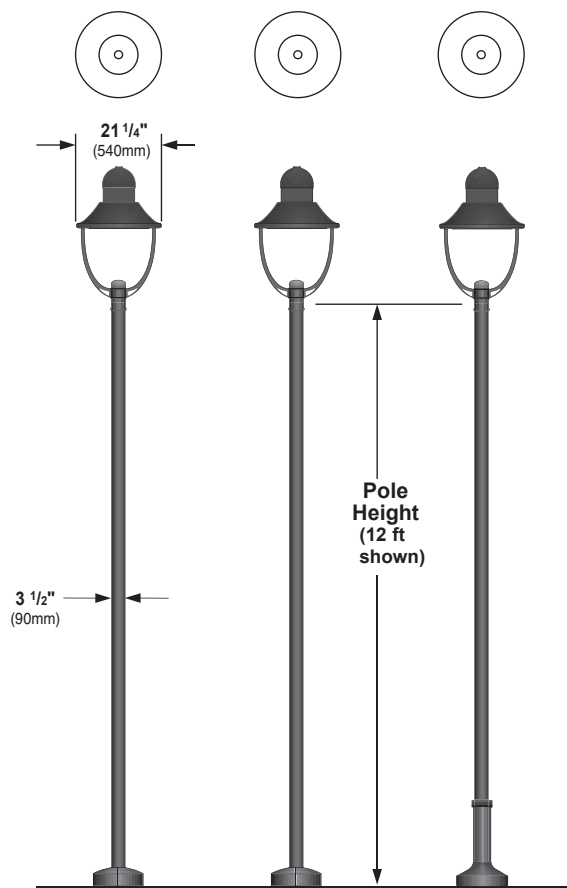
Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide. Hot Dip Galvanized finish (GV) on all steel parts also available.

*Preferred Pedestrian
Level Street Lighting
Manufacturer: Selux
Model: Beta
or equivalent*

Beta Lantern

Single

Die-cast aluminum fitter base secured to pole with three, stainless steel, Allen head set screws.



6.5 Town Centre Lighting Specifications

