Township of Langley
Est. 1873

REPORT TO
MAYOR AND COUNCIL

PRESENTED:	SEPTEMBER 9, 2019 – PUBLIC HEARING	**REPORT:**	19-137
FROM:	COMMUNITY DEVELOPMENT DIVISION	**FILE:**	08-27-0065
SUBJECT:	DEVELOPMENT PERMIT APPLICATION NO. 101066 (GATEWAY 200 BUSINESS PARK LTD. / 19864 – 84 AVENUE)		

PROPOSAL:

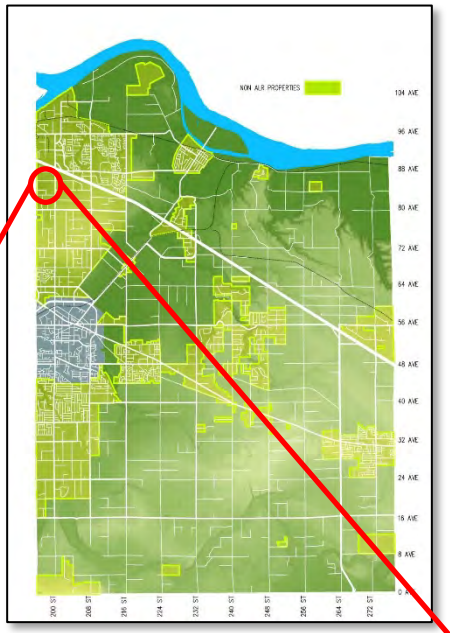
Development Permit application for a 2,194 m^2 (23,618 ft^2) industrial building located at 19864 – 84 Avenue.

RECOMMENTATION SUMMARY:

That Council authorize issuance of Development Permit No. 101066 subject to nine (9) conditions, plus eight (8) conditions to be completed prior to issuance of a building permit.

RATIONALE:

The proposal complies with the Willoughby Community Plan, Carvolth Neighbourhood Plan, and the site's Carvolth Business Park C-18 zoning.



RECOMMENDATION:

That Council authorize issuance of Development Permit No. 101066 to Gateway 200 Business Park Ltd., for property located at 19864 – 84 Avenue, subject to the following conditions:

a. Building plans being in compliance with Schedules “A” through “F”;
b. Landscape plans being in substantial compliance with Schedule “G” and in compliance with the Township’s Street Tree and Boulevard Planting Policy, to the acceptance of the Township;
c. Provision of a final tree management plan incorporating tree retention, replacement and protection details in compliance with the Township’s Subdivision and Development Servicing Bylaw (Schedule I - Tree Protection), to the acceptance of the Township;
d. All signage being in compliance with Schedule “H” and the Township’s Sign Bylaw;
e. Rooftop mechanical equipment to be screened from view by compatible architectural treatments;
f. All refuse areas to be located in an enclosure and screened to the acceptance of the Township;
g. All chain link fences being black vinyl with black posts and rails;
h. Section 111.3 of the Township of Langley Zoning Bylaw No. 2500 being varied from a minimum 2.0 metre depth in landscaping area along the interior side lot line in a commercial zone to permit a 1.85 metre depth in landscaping area as shown in Schedule “G”, and along the rear lot line to permit a varying depth from 2.0 metre to 0.6 metre as shown in Schedule “G”; and
i. All outdoor storage areas being covered by a dust free surface.

Although not part of the Development Permit requirements, the applicant is advised that prior to issuance of a building permit the following items will need to be finalized:

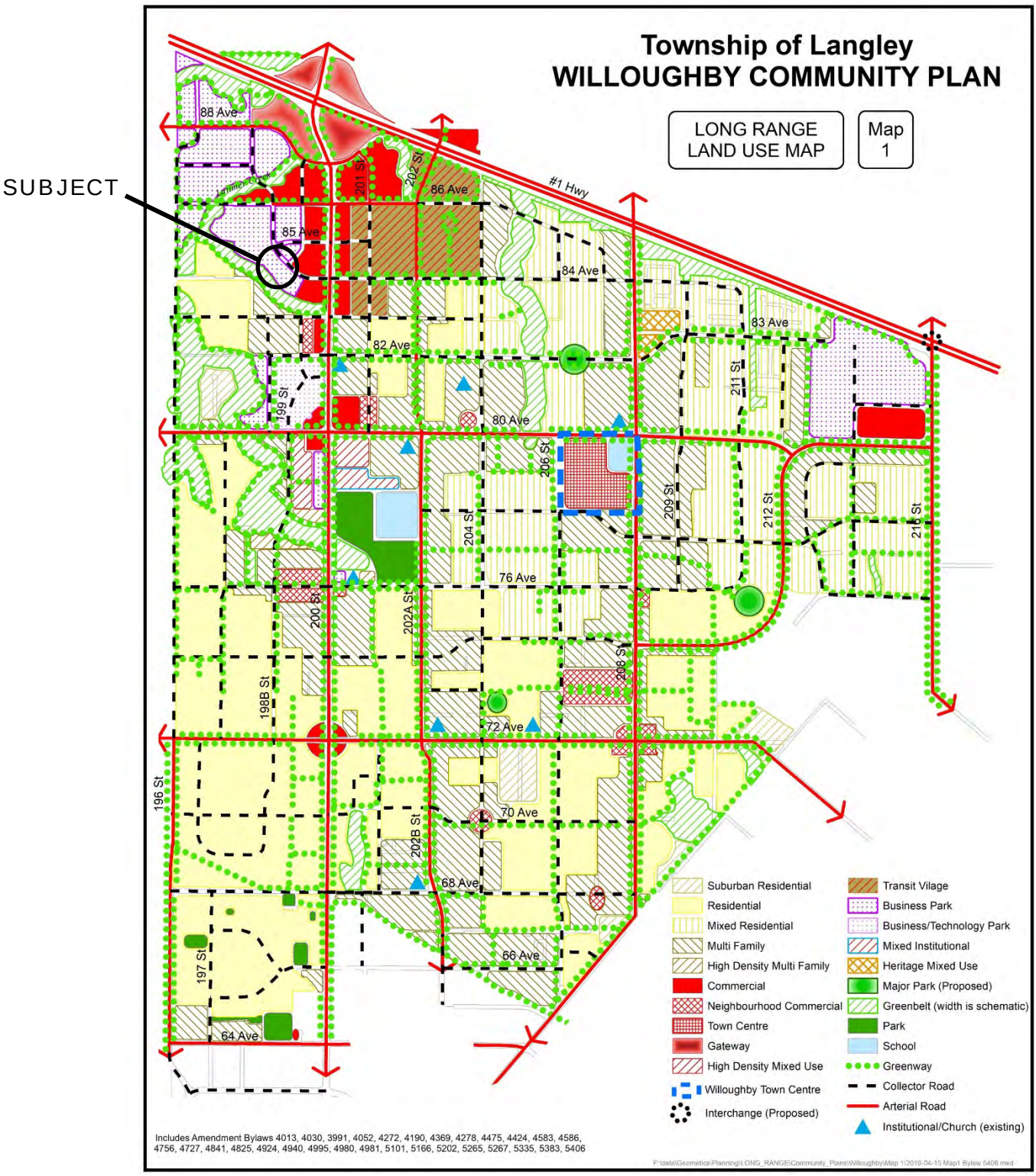
a. Issuance of Energy Conservation and GHG Emissions Reduction Development Permit No. 101067;
b. Submission of a site specific onsite servicing and storm water management plan in accordance with the Subdivision and Development Servicing Bylaw, to the acceptance of the Township;
c. Onsite landscaping being secured by a letter of credit at the building permit stage;
d. Submission of an erosion and sediment control plan or exemption in accordance with the Erosion and Sediment Control Bylaw, to the acceptance of the Township;
e. Provision of an exterior lighting impact plan prepared by an electrical engineer in compliance with the provisions of the Township’s Exterior Lighting Impact Policy to the acceptance of the Township;
f. Protection of existing neighbouring trees and construction of retaining walls along side lot lines in compliance with required geotechnical and arborist reports;
g. Payment of supplemental Development Permit application fees; and
h. Payment of applicable Development Cost Charges and Building Permit administration fees.

EXECUTIVE SUMMARY:

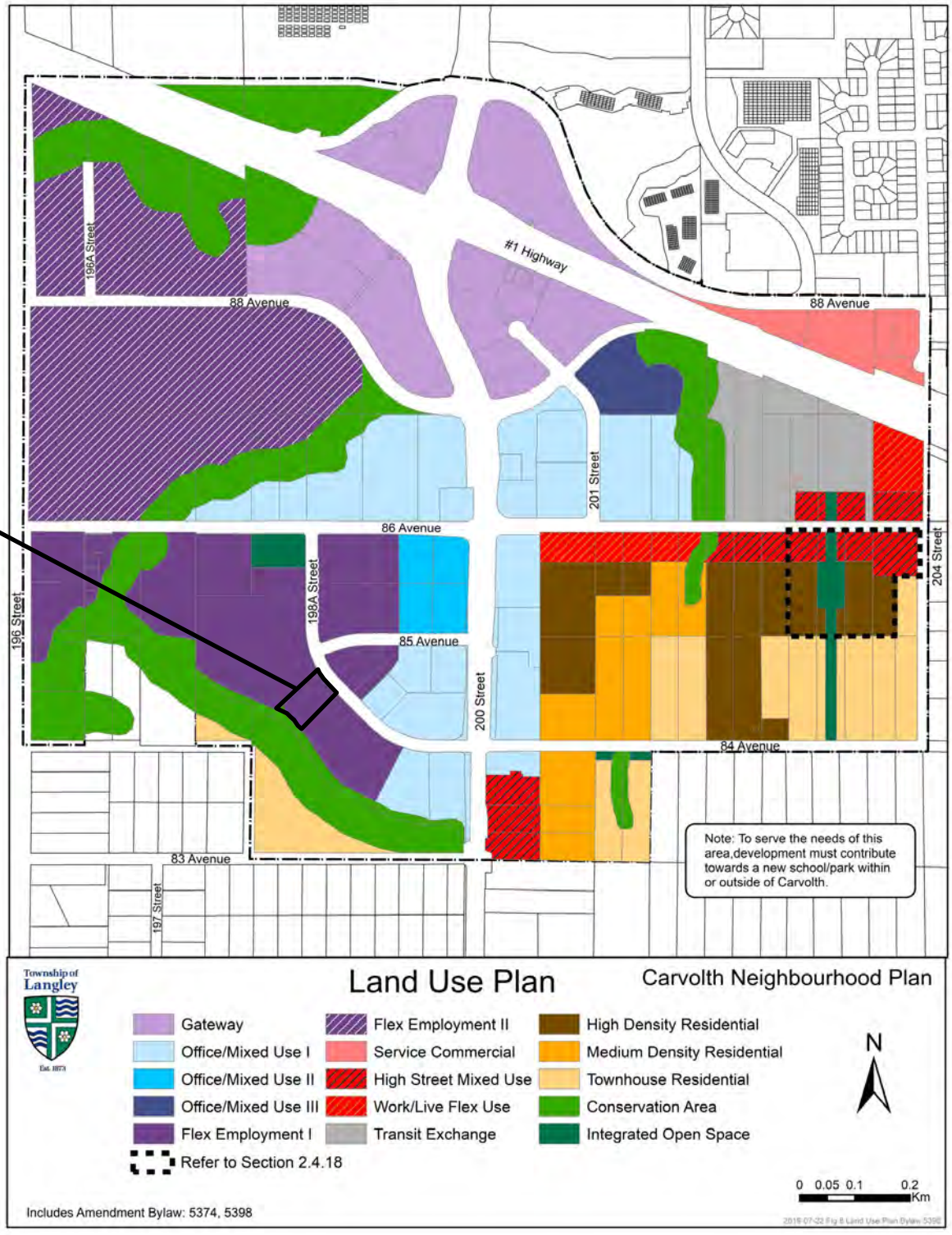
Wesgroup Properties Ltd. on behalf of Gateway 200 Business Park Ltd. has applied for a Development Permit to construct a 2,194 m^2 (23,618 ft^2) industrial building on a 0.60 ha (1.48 ac) site located in the Carvolth area. The development complies with the Development Permit Guidelines of the Carvolth Neighbourhood Plan (Attachment B).

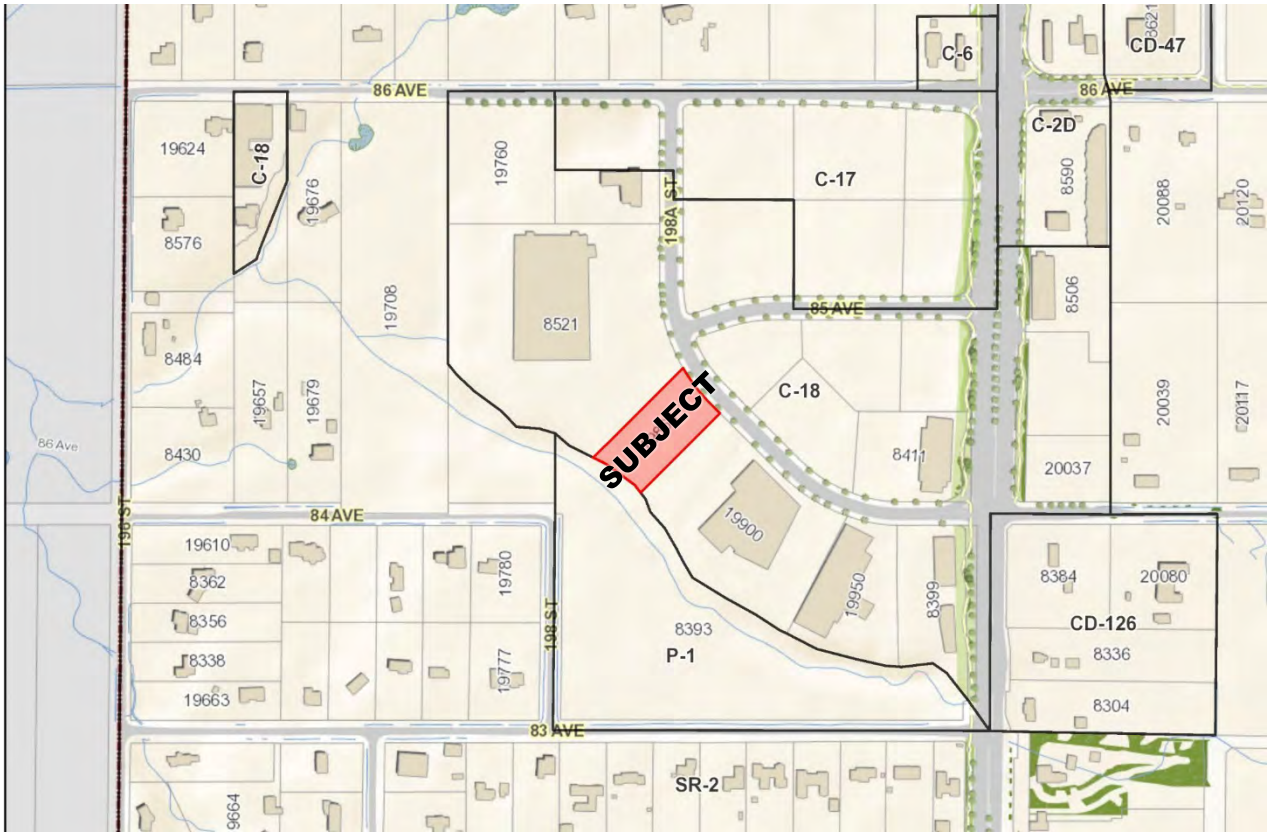
PURPOSE:

This report is to provide information and recommendations concerning proposed Development Permit No. 101066 for property located at 19864 – 84 Avenue.

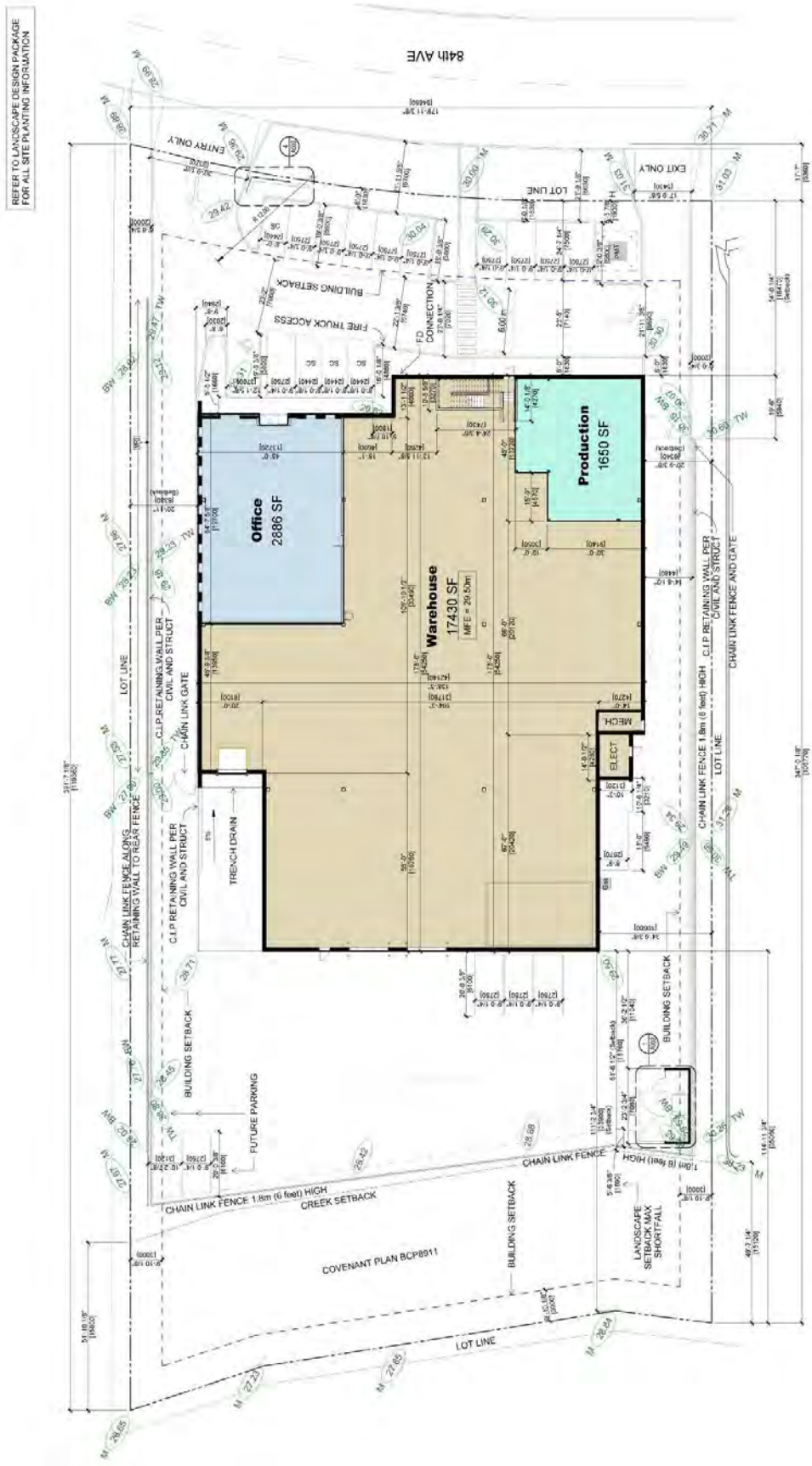

SUBJECT
Township of Langley
WILLOUGHBY COMMUNITY PLAN
LONG RANGE LAND USE MAP
Map 1
#1 Hwy
88 Ave
86 Ave
85 Ave
84 Ave
83 Ave
82 Ave
80 Ave
76 Ave
72 Ave
70 Ave
68 Ave
66 Ave
64 Ave
201 St
202 St
199 St
204 St
206 St
209 St
211 St
212 St
216 St
200 St
202A St
198B St
208 St
196 St
202B St
197 St
Suburban Residential
Residential
Mixed Residential
Multi Family
High Density Multi Family
Commercial
Neighbourhood Commercial
Town Centre
Gateway
High Density Mixed Use
Willoughby Town Centre
Interchange (Proposed)
Transit Vilage
Business Park
Business/Technology Park
Mixed Institutional
Heritage Mixed Use
Major Park (Proposed)
Greenbelt (width is schematic)
Park
School
Greenway
Collector Road
Arterial Road
Institutional/Church (existing)
Includes Amendment Bylaws 4013, 4030, 3991, 4052, 4272, 4190, 4369, 4278, 4475, 4424, 4583, 4586, 4756, 4727, 4841, 4825, 4924, 4940, 4995, 4980, 4981, 5101, 5166, 5202, 5265, 5267, 5335, 5383, 5406

SUBJECT


196A Street
#1 Highway
88 Avenue
88 Avenue
201 Street
86 Avenue
204 Street
196 Street
198A Street
85 Avenue
200 Street
84 Avenue
83 Avenue
197 Street
Note: To serve the needs of this area,development must contribute towards a new school/park within or outside of Carvolth.
Township of Langley
Land Use Plan
Carvolth Neighbourhood Plan
Gateway
Office/Mixed Use I
Office/Mixed Use II
Office/Mixed Use III
Flex Employment I
Refer to Section 2.4.18
Flex Employment II
Service Commercial
High Street Mixed Use
Work/Live Flex Use
Transit Exchange
High Density Residential
Medium Density Residential
Townhouse Residential
Conservation Area
Integrated Open Space
N
0 0.05 0.1 0.2
Km
Includes Amendment Bylaw: 5374, 5398



ZONING BYLAW NO. 2500



SITE PLAN – SUBMITTED BY APPLICANT

RENDERING – SUBMITTED BY APPLICANT

REFERENCE:

Owner:	Gateway 200 Business Park Ltd. 910 –1055 Dunsmuir St Vancouver BC V7X 1L3
Applicant / Agent:	Wesgroup Properties LP. 910 –1055 Dunsmuir Street Vancouver BC V7X 1L3
Legal Description:	Lot 1 Section 27 Township 8 New Westminster District Plan BCP48261
Location:	19864 – 84 Avenue
Area:	0.6 ha (1.48 ac)
Existing Zoning:	Carvolth Business Park Zone C-18
Willoughby Community Plan:	Business Park
Carvolth Neighbourhood Plan:	Flex Employment I

BACKGROUND/HISTORY:

The subject site is designated Flex Employment I in the Carvolth Plan and Business Park in the Willoughby Community Plan, and is zoned Carvolth Business Park Zone C-18. The subject site is currently vacant.

As the property is designated as a mandatory Development Permit area in the Carvolth Neighbourhood Plan, Council is provided the opportunity to review the form, character and siting of the proposed development. Issuance of the Development Permit is required prior to the issuance of a Building Permit

DISCUSSION/ANALYSIS:

A Development Permit for a 2,194 m^2 (23,618 ft^2), one (1) storey industrial building is proposed.

In accordance with Council's policy, a rendering, site plan and building elevations have been submitted detailing the proposed development's form character and siting. Proposed Development Permit No. 101066 is attached as Attachment A to this report.

Adjacent Uses

North: 84 Avenue, beyond which is a vacant property zoned Carvolth Business Park Zone C-18, designated as Flex Employment I in the Carvolth Neighbourhood Plan;

South: Latimer Creek, beyond which is a vacant property zoned Civic Institutional Zone P-1, designated as Townhouse Residential and Conservation Area in the Carvolth Neighbourhood Plan. The site is currently under application for the development of 14 single family lots, 51 townhouse and 135 apartment units (ToL Project No. 08-27-0066, pre-Council);

East: A property containing Corix Utilities and affiliated businesses, zoned Carvolth Business Park Zone C-18, designated as Flex Employment I in the Carvolth Neighbourhood Plan;

West: A property containing the Fraser Health Support Services facility zoned Carvolth Business Park Zone C-18, designated as Flex Employment I in the Carvolth Neighbourhood Plan.

Development Permit:
As the property is designated a mandatory development permit area, Council review of the form and character of the proposed development and issuance of a development permit is required prior to building permits being issued. The site is located in Development Area "M" – Carvolth, the guidelines for which are contained in the Carvolth Neighbourhood Plan (Attachment B).

The applicant is proposing a 2,194 m^2 (23,618 ft^2), one (1) storey industrial building. The building will be constructed from tilt up concrete panels painted dark grey and white with anodized aluminum accents (Attachment A – Schedule A). The northerly portion fronting 84 Avenue features extensive windows and spandrel glass to address the street. As a condition of the Development Permit, refuse bins are to be located in an enclosure and screened to the acceptance of the Township. A similar condition has been included in the Development Permit requiring the screening of rooftop mechanical equipment.

The proposal in staff's opinion is in compliance with the Development Permit Guidelines (Attachment B) of the Carvolth Neighbourhood Plan. The proposed development also complies with the Carvolth Business Park Zone C-18 provisions concerning use, height, site coverage (34%), and building setbacks.

GHG Development Permit
The subject property is located in Development Permit Area "O" of the Willoughby Community Plan, which establishes objectives to promote energy conservation and reduction of greenhouse gas (GHG) emissions through the issuance of a Development Permit. Council through Bylaw No. 5246 (Development Permit Delegation Bylaw) delegated issuance of Energy Conservation and GHG Emissions Development Permits to the Delegated Official (defined in the bylaw as the General Manager, Engineering and Community Development or Approving Officer, or designates). Staff note that an Energy Conservation and GHG Emissions Permit is being processed concurrently and its issuance is required prior to building permit as indicated in Development Permit No. 101066.

Signage:
Fascia signage is proposed on the north elevation of the building. Freestanding signage is proposed adjacent to the northerly driveway. The proposed signage is illustrated in Schedule H of the Development Permit, and is coordinated with the architectural design elements of the building. All signage is required to comply with the Township's Sign Bylaw.

Access and Parking:
Access will be provided to the site from 84 Avenue by two driveways. A total of 20 parking spaces are provided, in accordance with the minimum requirements of the Zoning Bylaw.

Landscaping:

The landscape plan (Attachment A – Schedule G) proposes the planting of 39 trees as well as shrubs and ground cover along all lot lines.

The Township of Langley Zoning Bylaw 1987 No. 2500 requires a landscape screen 2 m (6.6 ft) in depth along rear and interior side lot lines. The applicant has requested a variance to reduce the landscape screen depth along the east and south property line and provided the following rationale:

> *A landscape variance is requested along the east (project south) property line and the south (project west) property line. This included minimizing the landscape setback in these areas. The area of landscape variance requested is 145 sq ft (13.47 sq m) for the east property line, and 606.23 sq ft (56.32 sq m) on the south.*
>
> *Due to the site configuration being narrow in nature, and the location of the building footprint, the landscape variance was requested in order to facilitate safe and adequate space in the parking lot and drive aisles for loading truck maneuverability.*

Staff note the east and west interior side lot line requests are the result of the need to accommodate grade changes via retaining walls while the southerly property line already accommodates the streamside protection area.

Tree Protection/Replacement

The Tree Management Plan submitted by the applicant indicates that no significant trees exist on the developable portion of the subject site. A restrictive covenant exists on the southwest portion of the site protecting all vegetation within that area.

Staff note construction of retaining walls along the side lot lines will require geotechnical and arborist reports in order to ensure stability and protection of existing vegetation.

In accordance with the Township's Subdivision and Development Servicing Bylaw (Schedule I - Tree Protection), a total of 39 replacement trees are required (39 proposed). Three (3) existing street trees are to be retained and protected.

Final tree retention, protection and replacement plans are subject to final acceptance of the Township. This requirement has been included as a condition of the development permit.

Exterior Lighting:

As the subject site is located within 150 m (492 ft) of land zoned for residential purposes, compliance with the Township's Exterior Lighting Impact Policy is required. Provision of an exterior lighting impact plan prepared by an electrical engineer to the acceptance of the Township is required prior to the issuance of a building permit.

Servicing:

Full services exist to the site. As a condition of the building permit the applicant will be required to submit to the acceptance of the Township a site-specific onsite servicing and storm water management plan in accordance with the Subdivision and Development Servicing Bylaw. Additionally, an erosion and sediment control plan or exemption in accordance with the Erosion and Sediment Control Bylaw, to the acceptance of the Township will also be required.

Environmental Considerations:

The Township's Sustainability Charter includes environmental objectives to protect and enhance rivers, streams, wildlife habitat and environmentally sensitive areas in the Township. These environmental objectives are supported by policy and guidance outlined in the Township's Environmentally Sensitive Areas Study, Wildlife Habitat Conservation Strategy, Schedule 3 of the Township of Langley Official Community Plan, Erosion and Sediment Control Bylaw, and Subdivision and Development Servicing Bylaw (Schedule I – Tree Protection) which promote sound environmental management practices and outline Township environmental performance expectations. The provision of stormwater management and sediment control measures, and compliance with the Township's Subdivision and Development Servicing Bylaw (Schedule I – Tree Protection) satisfies the objectives of the Sustainability Charter.

There are no watercourses on the subject property. The subject site accommodates a portion of a watercourse protection area (registered restrictive covenant in 2003) for Latimer Creek (located on lands to the south).

POLICY CONSIDERATIONS:

The proposed development complies with the site's designation in the Carvolth Neighbourhood Plan and Willoughby Community Plan in addition to its Carvolth Business Park C-18 zoning. The proposal, in staff's opinion is in compliance with the Development Permit Guidelines of the Carvolth Neighbourhood Plan.

Staff have notified adjacent property owners that this Development Permit is being considered at this meeting, and they may attend and speak to the matter should they deem necessary.

Council's consideration of the Development Permit must be based on the form, character and siting of the proposal. Staff recommend that the Development Permit be issued as attached.

Respectfully submitted,

Rob Nordrum
DEVELOPMENT PLANNING TECHNICIAN
for
COMMUNITY DEVELOPMENT DIVISION

ATTACHMENT A Development Permit No. 101066

ATTACHMENT B Excerpt from the Carvolth Neighbourhood Plan – Development Permit Area 'M' – Carvolth

THE CORPORATION OF THE TOWNSHIP OF LANGLEY

Development Permit No. 101066

This Permit is issued this _____day of _____, 2019 to:

1. Name: Gateway 200 Business Park Ltd.

   Address: 910 - 1055 Dunsmuir Street
   Vancouver BC V7X 1L3

2. This permit applies to and only to those lands within the Municipality described as follows and to any and all buildings, structures and other development thereon:

   LEGAL DESCRIPTION: Lot 1 Section 27, Township 8, New Westminster District Plan BCP48261

   CIVIC ADDRESS: 19864 – 84 Avenue

3. This Permit is issued subject to compliance with all of the Bylaws of the Municipality of Langley applicable thereto, except as specifically varied or supplemented by this permit as follows:

   a. Building plans being in compliance with Schedules “A” through “F”;
   b. Landscape plans being in substantial compliance with Schedule “G” and in compliance with the Township’s Street Tree and Boulevard Planting Policy, to the acceptance of the Township;
   c. Provision of a final tree management plan incorporating tree retention, replacement and protection details in compliance with the Township’s Subdivision and Development Servicing Bylaw (Schedule I - Tree Protection), to the acceptance of the Township;
   d. All signage being in compliance with Schedule “H” and the Township’s Sign Bylaw;
   e. Rooftop mechanical equipment to be screened from view by compatible architectural treatments;
   f. All refuse areas to be located in an enclosure and screened to the acceptance of the Township;
   g. All chain link fences being black vinyl with black posts and rails;
   h. Section 111.3 of the Township of Langley Zoning Bylaw No. 2500 being varied from a minimum 2.0 metre depth in landscaping area along the interior side lot line in a commercial zone to permit a 1.85 metre depth in landscaping area as shown in Schedule “G”, and along the rear lot line to permit a varying depth from 2.0 metre to 0.6 metre as shown in Schedule “G”;
   i. All outdoor storage areas being covered by a dust free surface.

   Although not part of the Development Permit requirements, the applicant is advised that prior to issuance of a building permit the following items will need to be finalized:

   a. Issuance of Energy Conservation and GHG Emissions Reduction Development Permit No. 101067;
   b. Submission of a site specific onsite servicing and storm water management plan in accordance with the Subdivision and Development Servicing Bylaw, to the acceptance of the Township;
   c. Onsite landscaping being secured by a letter of credit at the building permit stage;

d. Submission of an erosion and sediment control plan or exemption in accordance with the Erosion and Sediment Control Bylaw, to the acceptance of the Township;
e. Provision of an exterior lighting impact plan prepared by an electrical engineer in compliance with the provisions of the Township's Exterior Lighting Impact Policy to the acceptance of the Township;
f. Protection of existing neighbouring trees and construction of retaining walls along side lot lines in compliance with required geotechnical and arborist reports;
g. Payment of supplemental Development Permit application fees; and
h. Payment of applicable Development Cost Charges and Building Permit administration fees.

4. The land described herein shall be developed strictly in accordance with the terms, conditions and provisions of this Permit and any plans and specifications attached as a Schedule to this Permit which shall form a part hereof.

   This Permit is not a Building Permit.

   All developments forming part of this Development Permit shall be substantially commenced within two years after the date the Development Permit is issued.

   This permit shall have the force and effect of a restrictive covenant running with the land and shall come into force on the date of an authorizing resolution passed by Council.

   It is understood and agreed that the Municipality has made no representations, covenants, warranties, guarantees, promises or agreement (verbal or otherwise) with the developer other than those in this Permit.

   This Permit shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns.

AUTHORIZING RESOLUTION PASSED BY COUNCIL THIS ____ DAY OF _____, 2019.

Attachments:

SCHEDULE A	Rendering
SCHEDULE B	Site Plan
SCHEDULE C	Building Elevations (North & South)
SCHEDULE D	Building Elevations (East & West)
SCHEDULE E	3D Views
SCHEDULE F	Colour and Materials Board
SCHEDULE G	Landscape Plan
SCHEDULE H	Signage Plan

Township of Langley
Est. 1873

SCHEDULE A
RENDERING

1 **Site Plan**
1/16" = 1'-0"

TKA+D

ZONING SUMMARY:

PROJECT ADDRESS:
84th Avenue, Langley BC

LEGAL DESCRIPTION:
LT1, SEC 27, TWP 8, NWD, PL BCP48261

Front Yard Setback: (North)	**Proposed:**	16.4m
	Required:	7.5m
Side Yard Setback:	**Proposed:**	6.3m
	Required:	3m
Side Yard Setback:	**Proposed:**	6.3m
	Required:	3m
Rear Yard Setback:	**Proposed:**	15.5m
	Required:	3m

AUTHORITY:	Township of Langley
ZONE:	C-18
USES:	Office / Industrial
Gross Site Area:	64,528 SF, (1.48 Ac)
Creek Setback:	9,029 SF, (0.21 Ac)
NET SITE AREA:	55,499 SF, (1.27 Ac)

Density (FSR):	**Proposed:**	0.36
	Allowed:	0.40
Lot Coverage:	**Proposed:**	34%
	Allowed:	40%
Height:	**Proposed:**	+/- 32'
	Allowed:	49'

Area Summary - By Occupancy

Occupancy	Area (SF)	Area (SM)
Warehouse	17430 SF	1619 m²
Manufacturing	1650 SF	153 m²
Office	2886 SF	268 m²
Storage	1653 SF	154 m²
	23618 SF	2194 m²

Parking Required:
Office - 268sm @ 1/28sm = 10
Industrial - 1,772sm @ 1/186sm = 10
Total = 20
Req. Accessible = 1

Parking Provided

Description	Count
Accessible Parking: ADA Approved	1
Parking Space - 2.75m x 5.8m: .	15
Parking Space - SC 2.44m x 4.88m: .	4
	20

Loading: Proposed: 1 Dock Bays
2 Grade Bays

3	2019/05/01	DP Comments
2	2019/04/08	BP Package
1	2018/11/09	DP Package

REV	DATE	DESCRIPTION
SCALE:	1/16" = 1'-0"	DATE: Issue Date
DRAWN:	TD	
PROJECT NUMBER	Project Number	

WESGROUP
TAYLOR KURTZ
ARCHITECTURE + DESIGN INC

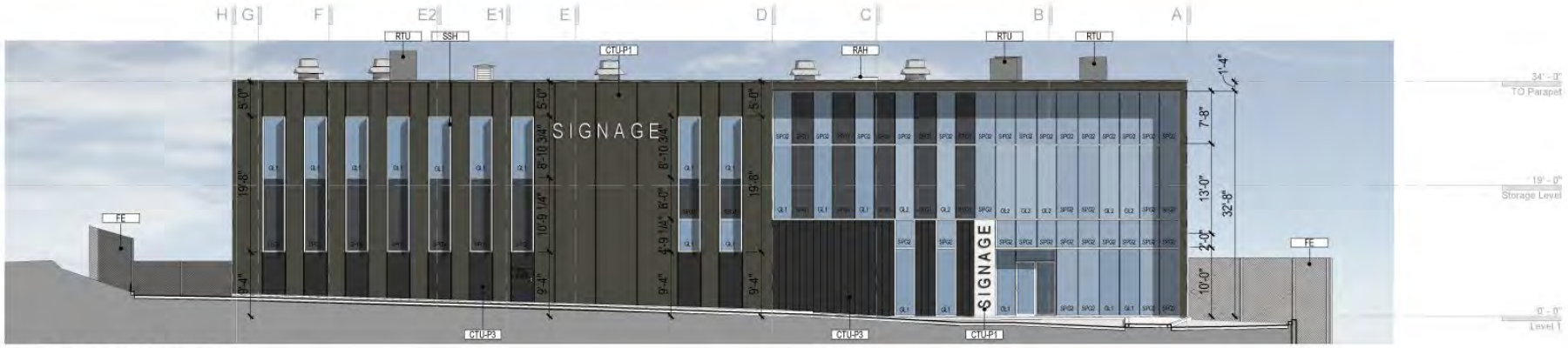
Lot 4 @ 200th
84th Avenue, Langley BC

Site Plan

A001

Township of Langley
Est. 1873

SCHEDULE B
SITE PLAN



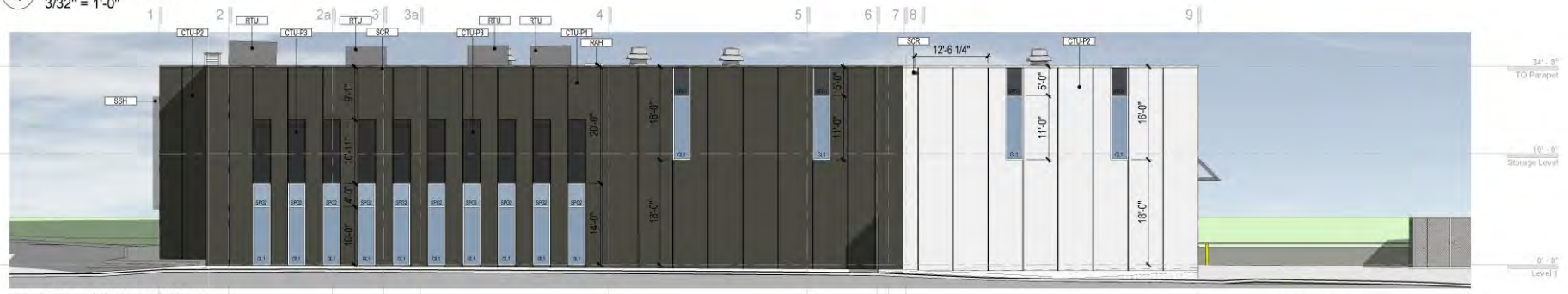
1 North Elevation
3/32" = 1'-0"

2 South Elevation
3/32" = 1'-0"

Township of Langley
Est. 1873

SCHEDULE C
BUILDING ELEVATIONS (NORTH & SOUTH)

4 **East Elevation**
3/32" = 1'-0"



3 **West Elevation**
3/32" = 1'-0"

Township of Langley
Est. 1873

SCHEDULE D
BUILDING ELEVATIONS (EAST & WEST)

View Looking South West

View Looking South East

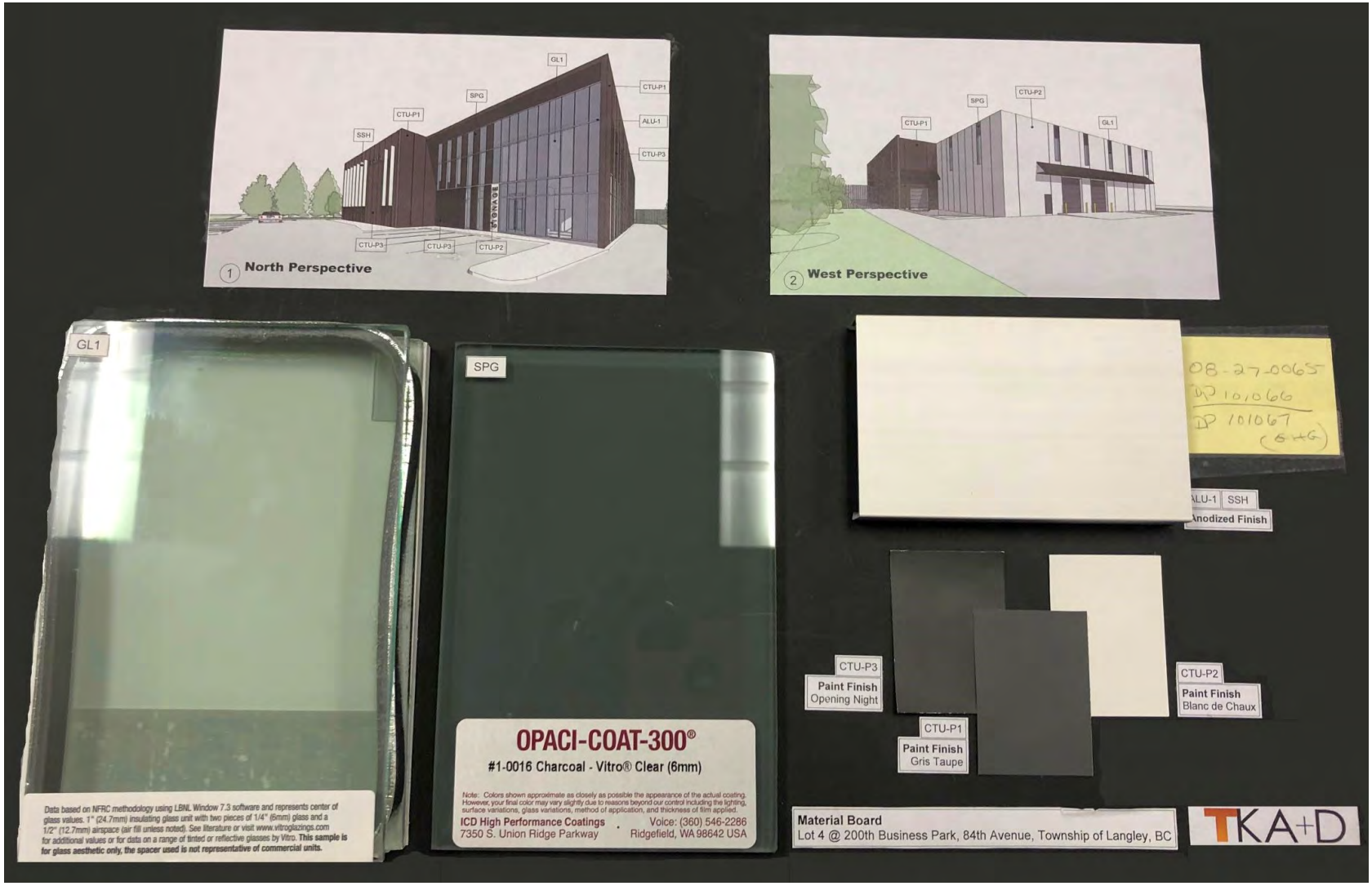
South West View

South East View

Township of Langley

Est. 1873

SCHEDULE E
3D VIEWS



Township of Langley

Est. 1873

SCHEDULE F
COLOUR AND MATERIALS BOARD

PLANT LIST

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	SIZE
		Trees		
	2	Acer circinatum	Vine Maple	2.5m ht.
	8	Acer rubrum 'Armstrong'	Bigleaf Maple	6cm cal.
	2	Liquidambar styraciflua 'Worplesdon'	Sweet Gum Var.	6cm cal.
	2	Cornus x 'Starlight'	Dogwood	5cm cal.
	4	Prunus serrulata 'Pink Perfection' alt. Magnolia	Flowering Cherry	5cm cal.
	1	Fraxinus americana 'Autumn Blaze'	Ash	6cm cal.
	2	Chamaecyparis nootkatensis	Nootka Cypress	2.5m ht / Spreading Form
	1	Pseudotsuga menziesii	Douglas Fir	2.5m ht / Natural Form
	3	Thuja plicata	Western Red Cedar	2.5m ht./ tree form
	14	Tsuga heterophylla	Western Hemlock	2.5m ht. / Natural Form
		Shrubs		
	11	Azalea japonica 'Rosebud'	Japanese Azalea	#2 pot
	19	Carex morrowii 'Aureo-vanegata'	Variegated Japanese Sedge	#1 pot
	7	Ilex crenata alt. Sarcococca hookeriana humilis	Japanese Holly	#2 pot
	17	Lonicera pileata	Evergreen Honeysuckle	#2 pot
	16	Mahonia nervosa	Oregon Grape (low)	#1 pot
	45	Prunus l. 'Otto Luken'	'Otto Luken Laurel'	#3 pot
	2	Rhododendron 'Christmas Cheer'	Rhododendron var.	#3 pot
	1	Ribes sanguineum	Red Flowering Currant	#3 pot
	3	Rosa nootkatensis	Nootka Rose	#2 pot
	1	Symphoricarpus alba (fruit bearing)	Snowberry	#2 pot
	17	Thuja occidentalis 'Smaragd'	Emerald Green Cedar	1.2m ht.
	104	Thuja plicata 'Excelsa'	Western Red Cedar Hedge	1.5m ht.
	25	Viburnum davidii	Viburnum	#2 pot
		Ground Covers/Perennials		
	550	Arctostaphyllos uva-ursi	Vancouver Jade	10cm pot 45cm o.c.

Landscape Notes:

1. Specification as per most recent 'BC Landscape standards' and Landspace Design Inc. 'Spec Notes'.
2. Automatic Irrigation System for Landscape Area.
3. 3" (75mm) Depth Bark Mulch in All Planting Beds.

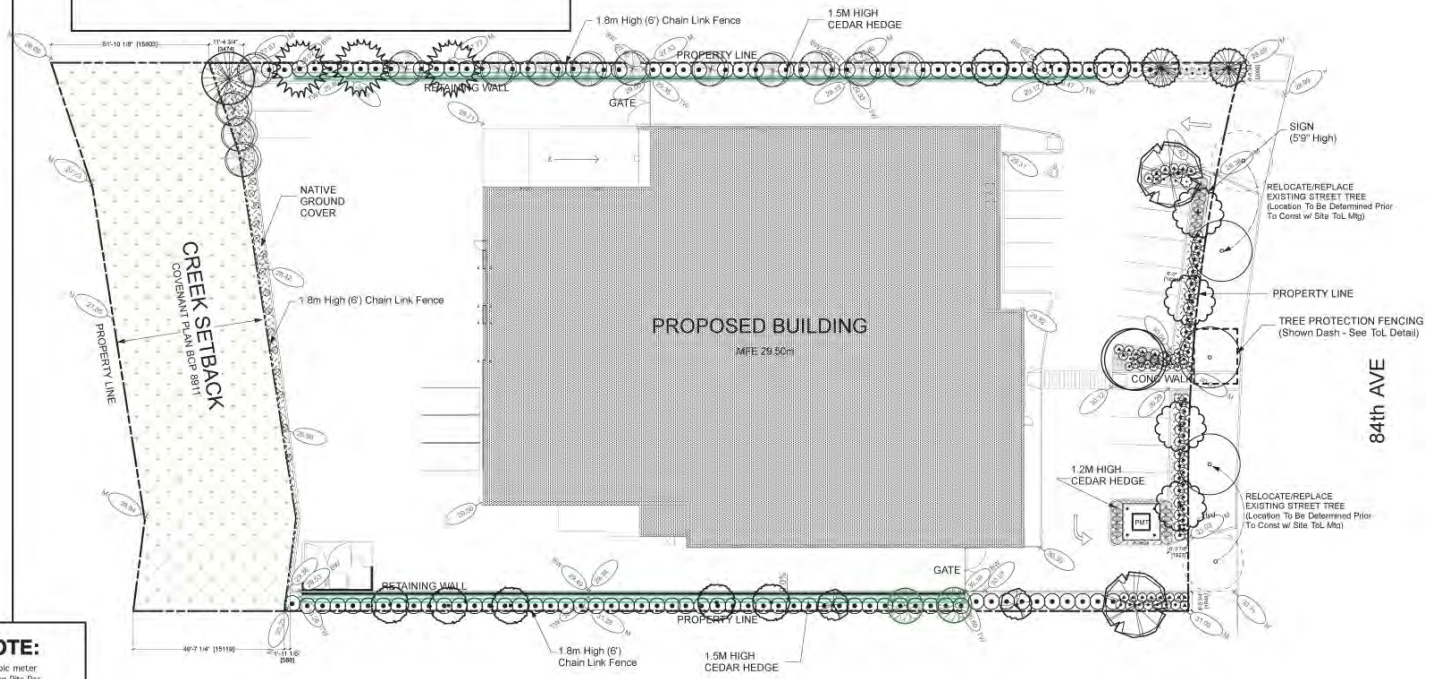
NOTE:
10 cubic meter Planting Pits Per Zoning Bylaw Section 111.4(1) & Width Per Section 111.4(3)

REPLACEMENT TREES

39 REPLACEMENT TREES REQUIRED (1.27 ACRES @ 30/ACRE)

39 REPLACEMENT TREES PROVIDED

- 20 CONIFEROUS TREES (50%)
- 19 DECIDUOUS TREES



TAYLOR KURTZ

Lot 4 @ 200th
84th Avenue, Langley, BC

LANDSCAPE PLAN

L1

Township of Langley

Est. 1873

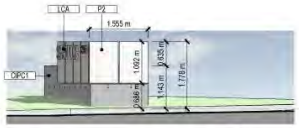
SCHEDULE G
LANDSCAPE PLAN

1 **North Facade Sign**
3/16" = 1'-0"

WALL SIGN
- 4.761 x 0.660 = 3.142m²
m² / LM = 0.131m²

ENTRY SIGN
- 3.684 x 0.508 = 1.871m²
m² / LM = 0.102m²

2 **Monument Sign - North**
3/16" = 1'-0"



3 **Monument Sign - West**
3/16" = 1'-0"

MONUMENT SIGN - NORTH
- 1.092 x 3.658 = 3.99m²

MONUMENT SIGN - WEST
- 1.092 x 1.555 = 1.70m²

TOTAL = 5.69m²

- ALLOWABLE SIGN AREA 1% OF LOT AREA
LOT AREA = 5,994.8m²
1% = 5.99m²

FINISHES SCHEDULE

CODE	MATERIAL	SUBSTRATE	MANUFACTURER / SUPPLIER	PRODUCT	COLOUR / FINISH	LOCATION	REMARKS
CIPC1	CAST IN PLACE CONCRETE - TYPE 1		SEE SPECIFICATIONS	ARCHITECTURAL FINISH PAIRFACED FORMWORK, PARGED, LIGHTLY SANDBLASTED & SEALED	COLOUR: CLEAR SEALER FINISH: NATURAL (SATIN)	VERTICAL SURFACES WHERE NOTED ON DRAWINGS	EXPRESSED/PLUGGED TIE HOLES IN PATTERN AS INDICATED; SUBMIT FORMWORK SHOP DRAWINGS
P1	PAINT TYPE 1 MID GRAY	CONCRETE TILT PANELS	BENJAMIN MOORE Contact: Phone:	EXTERIOR ACRYLIC LATEX - VOC FREE PAINT	COLOUR: Gray 2121-10 FINISH: MATTE	EXTERIOR, CONCRETE TILT PANELS	SELECTION TO BE CONFIRMED FROM PAINT DRAW DOWN SUBMITTALS
P2	PAINT TYPE 2 WHITE	CONCRETE TILT PANELS		EXTERIOR ACRYLIC LATEX - VOC FREE PAINT	COLOUR: White Wisp 2137-70 FINISH: MATTE	EXTERIOR, CONCRETE TILT PANELS	SELECTION TO BE CONFIRMED FROM PAINT DRAW DOWN SUBMITTALS
P3	PAINT TYPE 3 DARK GRAY	CONCRETE TILT PANELS		EXTERIOR ACRYLIC LATEX - VOC FREE PAINT	COLOUR: Wrought Iron 2124-10 FINISH: MATTE	EXTERIOR, CONCRETE TILT PANELS	SELECTION TO BE CONFIRMED FROM PAINT DRAW DOWN SUBMITTALS

4 **Singage Finishes Schedule**
3/8" = 1'-0"

TOL Sign Bylaw 2012 NO. 4927
8.1.1 FREE STANDING SIGN
- MAX 7.6M HIGH
- MAX 7.6M WIDE
- MAX 1.0% OF LOT AREA WHERE SIGN IS LOCATED

8.1.2 FASCIA, CANOPY, AWNING & PROJECTING SIGNS
- SHALL NOT EXCEED 0.6M² / LINEAL METER (LM) OF BUILDING FACE ON WHICH THEY ARE ERECTED

KEYNOTE LEGEND

TAG	DESCRIPTION
CIPC1	CAST IN PLACE CONCRETE - TYPE 1
CTU-P1	CONCRETE - TILT UP - PAINTED P1
LCA	LASER CUT ALUMINUM
P2	PAINT - COLOUR 2
P3	PAINT - COLOUR 3

Township of Langley
Est. 1873

SCHEDULE H
SIGNAGE PLAN

3.2 JUSTIFICATION AND INTENT

The broad intent of these design guidelines is to help shape and support high quality, attractive, functional urban design and a unique sense of place in the various Carvolth character areas. Specifically, the intent of the Carvolth Design Guidelines is:

- To emphasize building and open space design that enhances pedestrian activity, amenities, and safety.
- To encourage energy efficiency and low carbon building and neighbourhood design.
- To foster transit oriented design.
- To guide development of the Carvolth Neighbourhood as a major urban gateway to the Township with a high quality of design and a unique identity and sense of place.

The Carvolth Design Guidelines translate Township objectives and policies and into a set of design strategies and approaches to help guide the development review process for both private and public realm development.

3.3 DESIGNATION

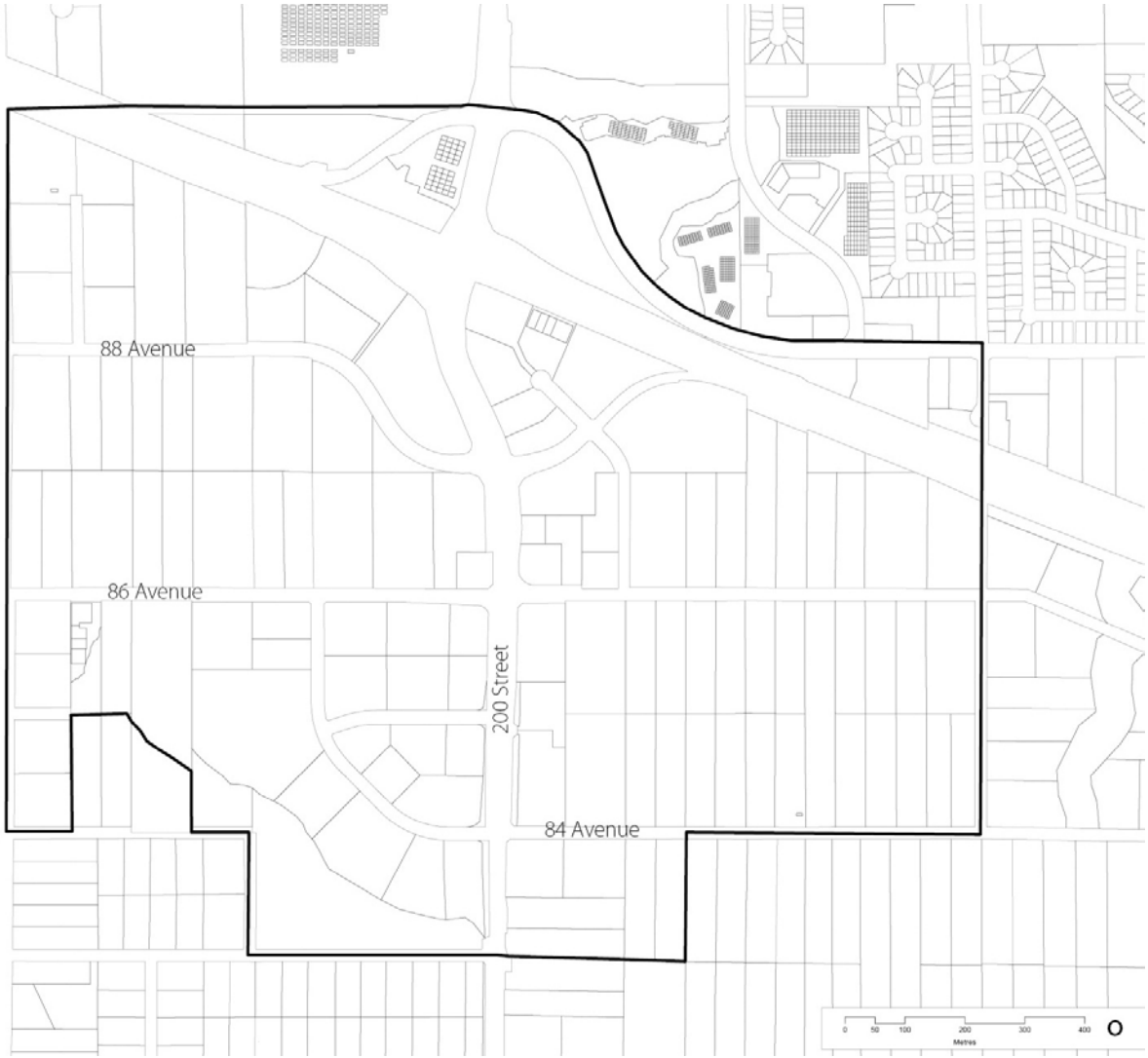
The Carvolth Development Permit Area is identified in the Willoughby Community Plan as Development Permit Area “M”. The lands identified on Figure 42: Carvolth Development Permit Area are designated under the following sections of the Local Government Act:

- 919(1) (e) establishment of objectives for the form and character of intensive residential development.
- 919(1) (f) establishment of objectives for the form and character of commercial, industrial or multi-family residential development.
- 919(1) (h) establishment of objectives to promote energy conservation.
- 919(1) (i) establishment of objectives to promote water conservation.
- 919(1) (j) establishment of objectives to promote the reduction of greenhouse gas emissions.

These sections of the Local Government Act allow regulation respecting the character of development within the Development Permit Area, including landscaping, and the siting, form, exterior design and finish of buildings and other structures, as justified by the special conditions and objectives in Section 3.2 of this Plan.

In addition, Development Permit Area “F” - Agricultural Land Reserve, as identified in the Willoughby Community Plan, also applies to the Carvolth Neighbourhood Plan area. See Section 4.3.2 of the Willoughby Community Plan for details.

Figure 42. Carvolth Development Permit Area.



3.4 GENERAL GUIDELINES

The general guidelines described below will apply to all new development in the Carvolth area. They are premised on urban design principles that will create a vibrant and accessible urban environment that promotes pedestrian activity and street life.

Figure 43. Mid-block pedestrian pathways increase connectivity.

3.4.1 Connectivity

The intent of these guidelines is to ensure a highly connective street and open space network that creates more route options for pedestrian and bicycle traffic traveling to, from and within the downtown, and direct connections to key amenities and destinations within and adjacent to Carvolth.

- Look for opportunities to create additional mid-block pedestrian pathways to increase the number of pedestrian connections within and through the site.

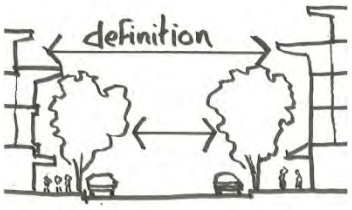


Figure 44. Buildings and street trees can be used to create "street definition".

3.4.2 Street Definition

The intent of these guidelines is to site and design buildings to positively frame and define streets and other public open spaces, and to ensure a positive response to specific site conditions and opportunities.

- Minimize the distance buildings are set back from the sidewalk to create good street definition and a sense of enclosure.
- Build ground floor commercial uses up to the front property line to maintain a continuous commercial street frontage and positive street definition. A setback may be considered where there is a courtyard or other feature that benefits the pedestrian experience or responds to the building setback of an adjacent property.
- New developments with tall buildings (over 4 storeys in height) should incorporate a base building or street-wall at a scale similar to adjacent buildings and appropriate to the street width.
- Buildings should be sited and designed to create the following general building height to street width proportions:
  - » 1:1 - 1:5 for mews or courtyards.
  - » 1:2 - 1:3.5 for residential and commercial streets.
  - » 1:3 - 1:5 for squares, plazas or wide boulevards.

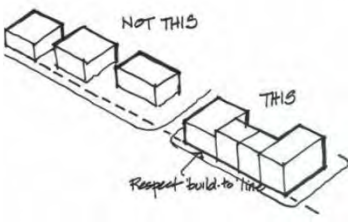


Figure 45. Use a common "build to line" to create a street definition and a sense of enclosure.

3.4.3 Height and Massing

The intent of these guidelines is to reduce the visual mass of large buildings, and ensure the sensitive transition from new development or redevelopment to existing adjacent buildings and open spaces.

- Site and design buildings to respond to specific site conditions and opportunities, including: prominent intersections, corner lots, steep topography, natural features, prominent open spaces and views.
- New development should reflect significant natural topographic features. Buildings should be designed to step down hillsides to accommodate significant changes in elevation and to connect with and transition well to the sidewalk and street.
- Break up the visual mass of large buildings to reduce their visual impact on the pedestrian realm and create variation along the street. Limit the visual mass of building facades to lengths of 40m or less.
- Buildings over 3 storeys in height shall have a maximum frontage length of 80m.
- Buildings 3 storeys in height or lower shall have a maximum frontage length of 40m.
- Buildings up to 4 storeys in height should step back the top storey back by a minimum of 1.5m.
- Building of 5 to 6 storeys in height should step back the top two storeys by a minimum of 1.5m.
- Minimize impacts from sloping sites on neighbouring development. Examples of treatments to minimize impacts include using terraced retaining walls of natural materials, or stepping a building to respond to the slope.

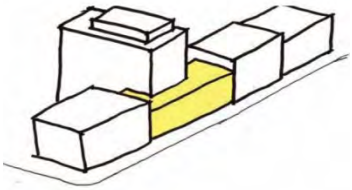


Figure 46. The base massing of this taller building should complement setbacks and heights of adjacent buildings.

Figure 47. Step buildings down to respond to the natural topography of the site.

3.4.4 Active Frontages

The intent of these guidelines is to ensure buildings are sited and designed to be welcoming, and encourage street vitality, visual interest, and safety.

- Site and orient buildings to overlook public streets, parks, walkways and communal spaces.
- Incorporate frequent entrances into commercial frontages facing the street with a maximum spacing of 15m. Ensure that these are active entrances. A maximum spacing of 10m for entrances is desired along retail high streets.

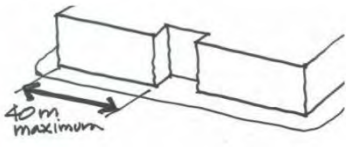


Figure 48. Limit the visual mass of building façades to lengths of 40 m or less.

- Recess building entrances by a minimum of 0.6m to provide for door swings, weather protection and to visually emphasize the building entrance.
- Large floor plate commercial developments shall respond to the prevailing street character along all commercial streets by incorporating small, transparent storefronts with frequent entrances.
- Large format commercial buildings with compatible uses should incorporate smaller shops wrapped around outside edges to better integrate these buildings and uses and make them more compatible with the desired character of the Carvolth area.
- Avoid expansive blank walls (over 5m in length) and retaining walls adjacent to public streets. When blank walls and retaining walls are unavoidable, use design treatments to break up the visual impact such as:
  - » A vertical trellis with climbing vines or other plant materials.
  - » Wall setbacks to provide room for planters.
  - » Wall murals, mosaics or other artistic features.
  - » Quality materials of different colours and textures.
  - » Special lighting, canopies, awnings, horizontal trellises or other human-scale features.
- Provide pedestrian access to buildings from the adjacent public street, and orient upper-storey windows and balconies to overlook adjoining public open spaces.
- On corner sites, develop street-facing frontages for both streets and design front elevations with pronounced entrances oriented to the corner and/or primary streets.
- Maintain site lines from inside the buildings to public open space to allow for casual surveillance of the street and sidewalk.
- Ensure a minimum glazing area of 75% for frontages at grade along all commercial streets.

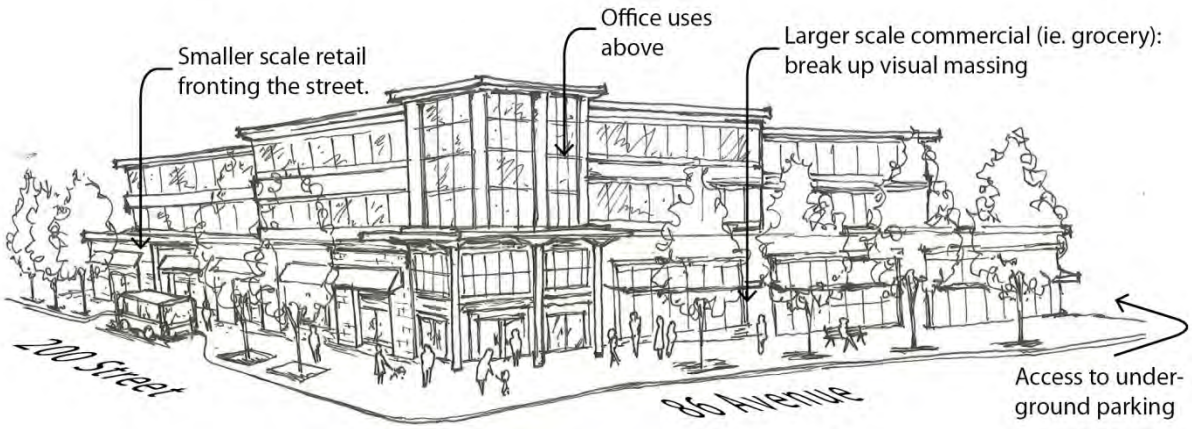
Figure 49. Vertical setbacks break up the visual mass of buildings.

Figure 50. When unavoidable, blank walls should be screened to make it more visually interesting.

Figure 51. Orient buildings to, and provide direct pedestrian access from, the adjacent public street/sidewalk.

3.4.5 Weather Protection

The intent of these guidelines is to provide comfort for pedestrians and enhance the pedestrian function of public streets through the provision of weather protection.



- Provide continuous weather protection along building frontages immediately adjacent to public streets, sidewalks or open space.
- Ensure that the depth, height and angle of weather protection are adequate to protect pedestrians from rain or snow that may be blown by the wind.
  - » The width to height ratio should be 1:1 to 1:1.4.
  - » The minimum height should be 2.5 m.
- Where sloping sidewalks occur, break up awnings and canopies into modules, and terrace them down to follow the profile of the street.
- Design canopies extending over building frontages greater than 30 m to reduce their apparent scale and length by, for example, breaking up the canopy to reflect the architecture and fenestration pattern of the building facade.

Figure 52. Weather protection to enhance pedestrian comfort.

Figure 53. Canopies provide weather protection over a large area in front of buildings.

3.4.6 Green Development

The intent of these guidelines is to encourage building design and site planning that maximizes livability, daylight access, and energy efficiency and reduces the overall “ecological footprint” (energy use, waste, and pollution) of development.

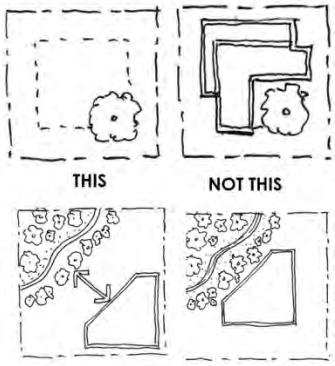


Figure 54. Retain existing trees and buffer ecologically sensitive areas.

Site Design

The intent of these guidelines is to preserve or enhance the natural habitat, energy performance and ecosystem processes of the site and the neighbourhood.

- Creating sustainable buildings starts with proper site selection. The location of a building affects a wide range of environmental factors such as ecosystem function, energy consumption and mobility. If possible, locate buildings in areas of existing development to concentrate development and take advantage of existing infrastructure. Consider conserving resources by renovating existing building for new uses. Maximize the restorative impact of site design. Additional guidelines related to landscaping and stormwater control can be found in Section 3.4.11 and 3.4.12 respectively.
- Minimize site disturbance during construction and retain or enhance existing vegetation where possible, particularly remnant riparian zones, watercourses, and urban forests.
- Enhance habitat, biodiversity and ecosystem processes through plant selection and landscape design. Include native or adaptive plant species.
- Minimize impervious surfaces such as roads, parking lots and sprawling buildings and infiltrate rainwater on-site using retention and infiltration best management practices as appropriate (bioswales, infiltration trenches, rain gardens, etc.).
- Incorporate green roofs, where appropriate, to help absorb stormwater, improve thermal efficiency, and provide outdoor amenity space for residents and workers.
- Improve service, minimize light pollution and maximize energy efficiency through the use of full cut-off lighting (avoiding light reflectance) and by directing lighting downwards. Exceptions may be made for signage and architectural lighting.

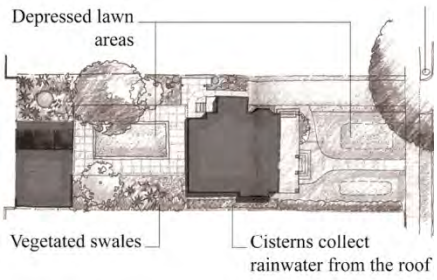


Figure 55. Landscape design can contribute to local ecosystem health.

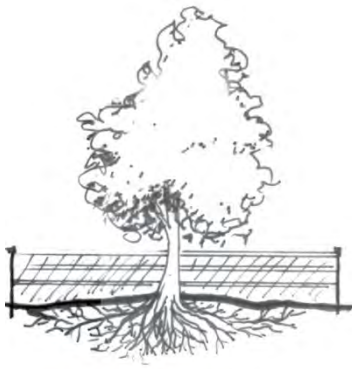


Figure 56. Protective barriers around existing trees.

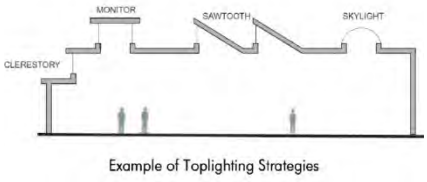


Figure 57. Roof openings can provide lighting where typical side lighting is restricted.

- Where possible, locate new buildings within a five minute walk (400 metres) of frequent public transit and provide alternative transportation incentives such as bike storage, change rooms and priority parking for bicycles, carpool vehicles or alternative fuel vehicles.
- Retrofit existing building where possible and look for opportunities to intensify use adjacent to existing infrastructure.

Energy Performance

The intent of these guidelines is to optimize building energy performance and where possible use energy from renewable sources.

- In this section it is important to balance complementary and competing priorities for passive design (efficiency, heating, cooling, daylighting and ventilation) to optimize energy performance and cost. Consider site and building constraints and the specific commercial, residential and institutional application in building design.
- Orient buildings to optimize passive solar energy potential. Most solar energy gain can be achieved when facing within around 20 degrees of solar south. For single loaded buildings, orient the building on an east-west axis and/or ensure a south facing roof aspect. For buildings that are double loaded, consider orienting the building on a north-south axis to ensure that units on both sides of the building receive some amount of solar exposure.
- To cost-effectively limit heat loss, limit fenestration to 40% of the total facade area (window to wall ratio). If higher fenestration ratios are desired, compensate with highly efficient windows. Fenestration should be emphasized on southern and western exposures and be minimized on northern and eastern exposures.
- Maximize daylight penetration by locating windows high on walls or by using clerestories and light shelves.
- Ensure solar shading with an emphasis on those buildings with high window to wall ratios. The benefits of reducing solar gains in summer should be balanced with the benefit of solar gains in the winter by taking advantage of the different seasonal sun angles. External shading such as recessed balconies, overhangs, and louvers are preferable over internal shading such as internal blinds.

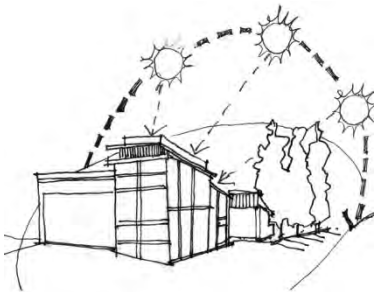


Figure 58. Buildings oriented to maximize use of solar energy.

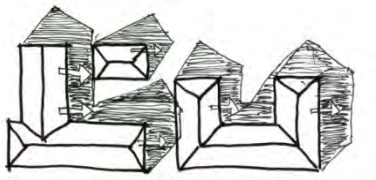


Figure 59. Corner and through units facilitate natural ventilation and daylight access.

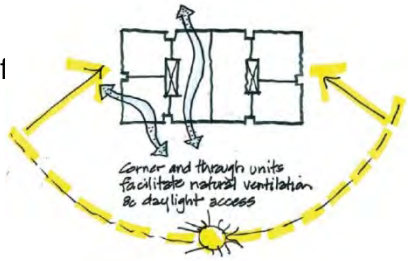


Figure 60. Sun shade diagrams can help determine the siting of buildings to minimize overshadowing of adjacent open

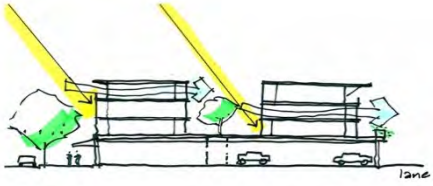


Figure 61. Through units allow for natural ventilation and increased daylight access.

- Balance narrow floor plans that increase the potential for cross ventilation and penetration of daylight into the building with minimizing the envelope to floor area ratio to optimize thermal efficiency.
- Design with greater floor-to-ceiling heights to increase the amount of interior space that can be lit from windows.
- Buildings should be narrow to increase the amount of interio space with access to day-lighting and winds for passive ventilation. Buildings with through units (i.e., units with exterior walls on at least two sides) can be created by incorporating a mews or central courtyard into the form and design of low rise buildings or into the base massing of tall buildings.
- Design residential buildings to receive daylight and natural ventilation from at least two sides of the building, or from one side and a roof. Where possible, dwellings should have a choice of aspect: front and back, or on two sides (for corner units).
- Ensure that the siting, form, and scale of buildings do not block significant views and solar access from existing or anticipated development, and that shadowing impacts on adjacent residential buildings and usable open spaces are minimized. Proposals for new projects should include sun/shade diagrams of the subject development and the surrounding properties at the following times:
  - » Equinox: 8 a.m., 12 noon, 4 p.m.
  - » Winter Solstice: 9 a.m., 12 noon, 3 p.m.
- Incorporate courtyards and greenways in residential and mixed-use projects to maximize the amount of direct sunlight received.
- Landscaping and building design should ensure solar access in winter and in summer provide shading of afternoon sun and reduce the urban heat island effect. Provide deciduous landscaping and/or shading devices on southern and western exposures.
- For all outdoor lighting, use efficient lighting design such as LEDs and motion or photo-sensitive lighting.
- Use energy efficient fixtures and design lighting for specific needs to reduce ambient lighting requirements.

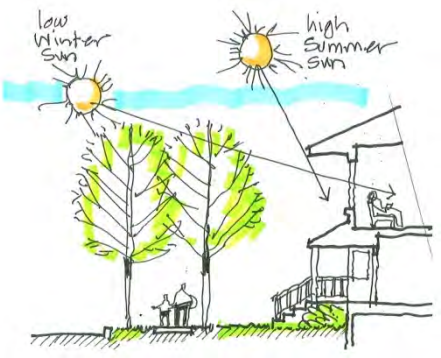


Figure 62. Ensure light penetration into interior living spaces in winter, and protection from direct sunlight in the afternoon hours of summer.

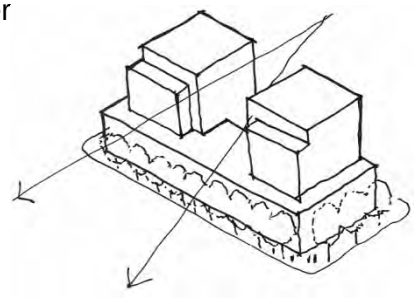


Figure 63. Slender building forms enhance daylight penetration and cooling through cross ventilation.

Figure 64. Sun shading devices reduce lighting and cooling demands and protect the building envelope from pre-mature aging.

- Acquire at least 5% of the building's total energy through the use of on-site renewable energy systems with an emphasis on heating and cooling systems such as geo-exchange, air-source heat pumps, heat recovery from wastewater, biomass, or solar thermal. If a District Energy system is established in Carvolth, connection to the system could be considered to meet this guideline.

Figure 65. Shared composting facilities.

Water

The intent of these guidelines is to protect and conserve fresh water resources.

- Limit or eliminate the use of potable water for landscape irrigation by using high-efficiency irrigation technology, captured rain or recycled site water and/or drought tolerant plant species.
- Design landscaping and select plants that are appropriate for the local climate, minimizing irrigation needs.
- Design lawns for residential and commercial use, rather than aesthetics, minimizing unnecessary irrigation.
- Reduce the generation of wastewater and potable water demand by using captured rainwater for sewage conveyance or by treating wastewater on site to tertiary standards.
- Employ water efficiency strategies such as water-conserving plumbing fixtures, appliances and control technologies.

3.4.7 Public Realm

The intent of these guidelines is to ensure that the design of streets and open spaces creates visual interest, comfort and safety for pedestrians and contributes to a unique local identity and sense of place.

- Provide a continuous planting of street trees along both sides of streets in residential, commercial and office neighbourhoods.
- Provide a zebra- or ladder-painted crosswalks, or crosswalk made of special paving materials, at all key pedestrian crossings to increase driver awareness.
- Curb to curb widths of local streets should be as narrow as practical to accommodate expected traffic and services.
- Incorporate corner bulges into streetscape design to enhance pedestrian crossings and provide space for landscaping, stormwater management, seating and public art.
- Ensure a continuous public sidewalk on both sides of the street throughout the Carvolth area.

Figure 66. Buildings should be designed and oriented to encourage casual surveillance and "eyes on the street."

- Provide street furnishings, including transit shelters, benches, lighting, and waste receptacles to enhance the public realm.
- Cafes are permitted and encouraged on public sidewalks in commercial areas provided that safe passage for pedestrian and emergency services is maintained.
- Pedestrian-oriented lighting should be provided throughout residential, commercial and office areas.
- Distinctive bus shelters or deep canopies should be provided along major transit routes to provide comfort for transit users.
- Hydro kiosk/utility boxes to be incorporated wherever possible into landscape areas to reduce visual impact.

3.4.8 Safety, Security and Accessibility

The intent of these guidelines is to enhance personal safety and security through building siting, orientation, and design, and to ensure buildings and open spaces accommodate and provide access for all users and abilities.

Figure 67. Buildings oriented to the street with clear definition of the transition from public to private realm help to promote neighbourhood safety and security.

- Ensure the design of new development increases “eyes on the street” with the placement of windows, balconies and street-level uses, and allows for casual surveillance of parks, open spaces, and children’s play areas.
- Avoid blank, windowless walls that do not permit residents or workers to observe public streets and open spaces.
- Incorporate the creative use of ornamental grilles over ground-floor windows or as fencing, as necessary/appropriate.
- Provide adequate lighting along streets and at entrances to enhance the sense of personal safety and security.
- Design parking areas to allow natural surveillance by retaining clear lines of sight to and between public sidewalks and building entrances for those who park there and for users of nearby buildings.
- Ensure CPTED principles are adhered to with respect to landscape design and construction.
- Ensure all pedestrian routes including those leading to building entrances are safe and easy to use by a wide range of pedestrian abilities. Generally, such routes should be direct, level, obstacle-free, easily identifiable and clearly separated from vehicular routes.

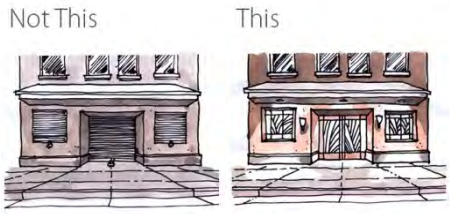


Figure 68. Security grilles can be incorporated in an attractive way.

3.4.9 Tall Buildings

The intent of these guidelines is to encourage siting, massing and design that minimizes negative impacts on views, privacy, and solar access for individual units, reduce the perceived bulk of tall buildings, and minimize impacts of tall buildings on adjacent public streets and open spaces.

Tall Buildings are defined as buildings over 6 storeys or 18 m in height. In addition to the preceding general guidelines (Sections 3.1 - 3.12), the following tall building guidelines are applicable to development proposals that include buildings over 6 storeys in height.

- An open spacing of tall buildings should be maintained to ensure adequate light, air, access and views for residents.
- The minimum facing distance between tall buildings should be 40 m.
- The placement of tall buildings should achieve a diagonal spacing to avoid tall buildings looking directly into each other.
- Tall buildings should have a maximum floor plate size of 700 sq. m.
- Tall buildings should have a maximum floor plate width of 24 m.
- The bulk of towers should be minimized using vertical and horizontal articulation, for example, by incorporating changes of plane, stepped terraces or modulated plan and facade forms.
- Tall buildings should have a maximum height of 50 m, excluding appurtenances and mechanical equipment.
- Tall buildings should generally be aligned parallel to the street in a north-south direction.
- New developments with tall buildings should incorporate a base building sited and scaled to complement adjacent buildings and to create a strong street edge definition. (See section Street Definition Guidelines, section 3.3).
- Tall buildings should incorporate ground floor uses that have views into and, where possible, access to, adjacent streets, parks and open spaces.
- Tall buildings should be set back a minimum of 5 m from the fronting public street or open space, while still achieving good address on the fronting public street or open space.

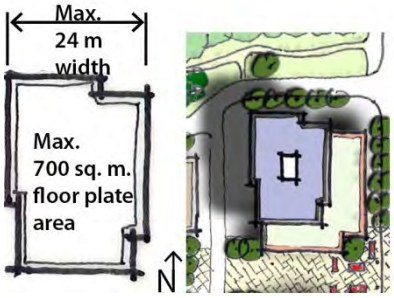


Figure 69. Tall buildings.

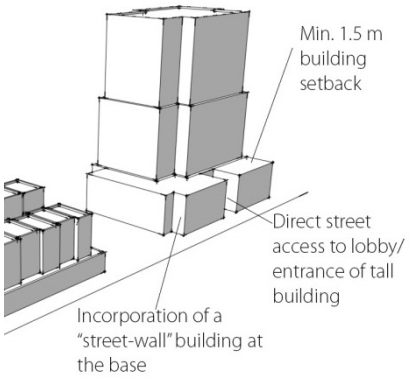


Figure 70. Ensure vertical and horizontal articulation.

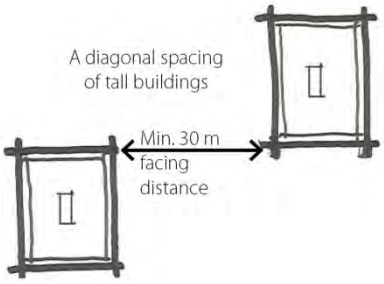


Figure 71. Spacing of tall buildings.

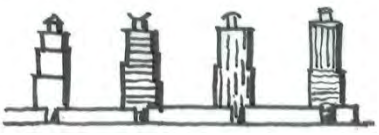


Figure 72. Variation in tower form and design should be achieved.

- Tall building address should be achieved by stepping back the base building (podium) at the primary entrance of tall buildings to allow the tall building to meet the street and by locating main building entrances so that they are clearly visible and directly accessible from the public sidewalk, plaza or other open space.
- An interesting and varied roof form should be achieved, for example, by incorporating a top pent house or amenity space to conceal appurtenances and mechanical equipment.

3.4.10 Master Planning Tall Buildings and Large Sites

The intent of these guidelines is to ensure the integration of larger sites and sites with tall buildings with adjacent areas.

Proposals for Large Sites and sites with Tall Buildings should include a master plan. Master planning will enable tall buildings to be sited and organized in a way that provides desirable transitions to adjacent areas and ensures appropriate tall building separation. More broadly, a master planning process will help knit the public realm into a single, cohesive whole as demonstrated by the illustrative concept plan and encouraged by the design guidelines.

A Master Plan is to be provided at both the neighbourhood scale and the site or block scale and should reflect the intent of the Integrated Area Concept Plan (Figure 7) and Design Guidelines.

Tall Buildings are defined as buildings over 6 storeys or 18 m in height. Large Sites are defined as those over 5000 sq. m in size. However, the Township may, at its discretion, identify other sites with special characteristics or conditions where master plans will be required. A Master Plan for Large Sites and sites with Tall Buildings should describe in drawings and words for the site and its context the following issues:

Figure 73. Master planning should reflect the pattern of streets, open spaces and built form described in this plan.

- The location and dimensions of public streets, parks and accessible open spaces.
- General location and dimensions of pedestrian circulation and relationship to pedestrian sidewalks and paths, transit stops and shelters.
- General location of building footprints - base buildings and taller buildings.
- General layout and dimensions of setbacks from streets, parks and open spaces, as well as dimensions between base and tall buildings on the same site.
- General location of building entrances for each building.
- General location and dimensions of site access, service areas, ramps, drop-off and parking for each building.
- The location of watercourses including non-disturbance areas.
- Phasing plan and schedule.
- Perspective showing important views.

- Shadowing impacts on adjacent buildings and open spaces using sun/shade diagrams at the following times:
  - » Equinox: 8 a.m., 12 noon, 4 p.m.
  - » Winter Solstice: 9 a.m., 12 noon, 3 p.m.

3.4.11 Parking, Servicing and Access

The intent of these guidelines is to ensure the provision of adequate servicing, vehicle access, and parking while minimizing negative impacts on the safety and attractiveness of the pedestrian realm.

- Structured underground or “tuck-under” parking is preferred over off-street surface parking.
- Where off-street surface parking is unavoidable, it should be located to the rear of the building with parking access from the lane or side street.
- Off-street parking located between the front face of a building and the public sidewalk is not permitted.
- If surface parking is located beside the building and adjacent to the public sidewalk, screen these areas from sidewalks and other active open spaces using materials that provide a visual buffer while still allowing clear visibility into the parking areas to promote passive surveillance.
- Locate public on-street parking at the curb to provide convenient and easy access to commercial/residential entrances.
- In general, vehicular access should be from the lane. Where there is no lane, and where the reintroduction of a lane is not possible, access may be provided from the street, provided that:
  - » The street is not a primary retail high street.
  - » Access is from the long face of the block.
  - » There is no more than one interruption per block face and only one curb cut on the street.
- Any vehicular entrance and its associated components (doorways, ramps, etc.) should be architecturally integrated into the building so as to minimize the visual impact.
  - » Avoid ramps located directly off the street or lane.
  - » Use treatments such as screening, high-quality finishes, sensitive lighting and landscaping to minimize the visual impact of parking ramps and entrances.
- Incorporate pedestrian pathways and landscaping into surface parking areas. Pedestrian sidewalks should be incorporated into islands to minimize conflict with vehicles.

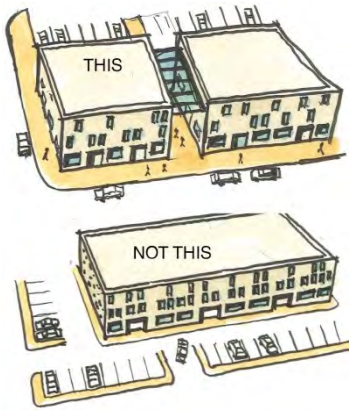


Figure 74. Off-street parking uses should not be located between the front of a building and the public sidewalk.

Figure 75. Access to underground parking should be architecturally integrated to minimize the visual impact.

Figure 76. Screen surface parking using a trellis, landscaping, or climbing vines that maintain site lines.

- Bicycle parking should be located in a visible, active and well lighted area convenient to primary building access and bike route access.

3.4.12 Lighting

The intent of these guidelines is to contribute to the overall quality, character and safety of the Carvolth area.

- Illuminate building facades and features by providing architectural lighting on the face of commercial and office buildings and at the main entrances to multi-family residential buildings to help create a sense of safety and intimate space around the building.
- Light paths and entry areas sufficiently to ensure pedestrian comfort and safety while avoiding visible, glaring light sources.

Figure 77. A combination of wall-mounted lights and up lighting animate the building façade and adjacent pedestrian areas.

3.4.13 Landscaping

The intent of these guidelines is to contribute to the overall quality, character and ecological function of the Carvolth area.

- Use landscaping to create a positive interface between buildings and streets by using perennials, shrubs, and trees to soften buildings where appropriate.
- Use hard landscape features such as terraced retaining walls and planters to transition between grades.
- Provide a continuous planting of street trees along both sides of all public streets with a maximum tree spacing of 10 meters.
- Use native or adaptive plant species to enhance ecological function and reduce the need for external inputs such as additional watering and fertilizers.
- Irrigate landscape material during plant establishment.
- Existing healthy trees should be preserved where possible.

3.4.14 Stormwater Source Control

The intent of these guidelines is to provide guidance and inspiration on innovative means of achieving stormwater management objectives.

Absorbent Landscape:

- Maximize the area of absorbent landscape on site and conserve as much existing vegetation and undisturbed soil as possible.
- Disconnect impervious areas (such as roofs and parking lots) from the storm sewer system and have them drain into an absorbent landscape.
- Maximize the vegetation canopy cover over the site and provide multi-layered canopies where possible.
- Ensure adequate growing medium depth for horticulture and stormwater needs: a minimum of 150 mm for lawn areas, and 450 mm for shrub/tree areas.

Infiltration Swale:

- Flow to the swale should be distributed sheet flow (i.e., travelling through a grassy filter area). Provide pre-treatment and erosion control to avoid sedimentation in the swale.
- Provide a 25 mm drop at the edge of paving to swale soil surface.
- Provide longitudinal slope of 1-2% and ensure side slopes are not more than 3 (horizontal): 1 (vertical).
- Provide weirs or check dams to slow water flow with a maximum ponding level of 150 mm.

Infiltration Rain Garden:

- At point source inlets, install non-erodible material, sediment cleanout basins, and weir flow spreaders; install a non-erodible outlet or spillway to discharge overflow.
- Soil depths of 450 mm to 1200 mm are desirable; use soils with a minimum infiltration rate of 13 mm/hour.
- Surface planting should be primarily trees, shrubs, and groundcovers, with planning designs respecting the various soil moisture conditions in the garden.
- Drain rock reservoir and perforated drain pipe may be avoided where infiltration tests by a design professional show subsoil infiltration rate that exceeds the inflow rate.

Figure 78. Stormwater infiltration as an amenity for residents.

Figure 79. Weirs and check-dams help to slow the flow of water and facilitate infiltration.

Figure 80. Storm water source controls like these rain gardens reduce pollutant run-off.

Pervious Paving:

- Ensure protection of pervious paving from sedimentation during and after construction.
- Surface slow should be at least 1% to avoid ponding and related sedimentation of fine particulate matter.
- Wrap paver bedding material with geotextile filter cloth on bottom and sides to maintain water quality performance.

Extensive Green Roof

- Ensure at least 2% slope for drainage.
- Avoid monocultures to increase success of establishing a self-maintaining plant community.
- Provide plan free zones along the perimeter, adjacent facades, expansion joints, and around each roof penetration.
- Ensure intensive maintenance during establishment (2 years).

Infiltration Trench

- Locate infiltration trenches at least 3.0 m from any building.
- Provide access for periodic inspection and clean-out.
- Install the infiltration trench in native ground, and avoid over-compaction of the trench sides and bottom.

3.5 CHARACTER AREA GUIDELINES

The character area guidelines described below will provide additional detail about the unique character and urban design of the various character areas in Carvolth. These guidelines are intended to supplement the general design guidelines described in the previous section.

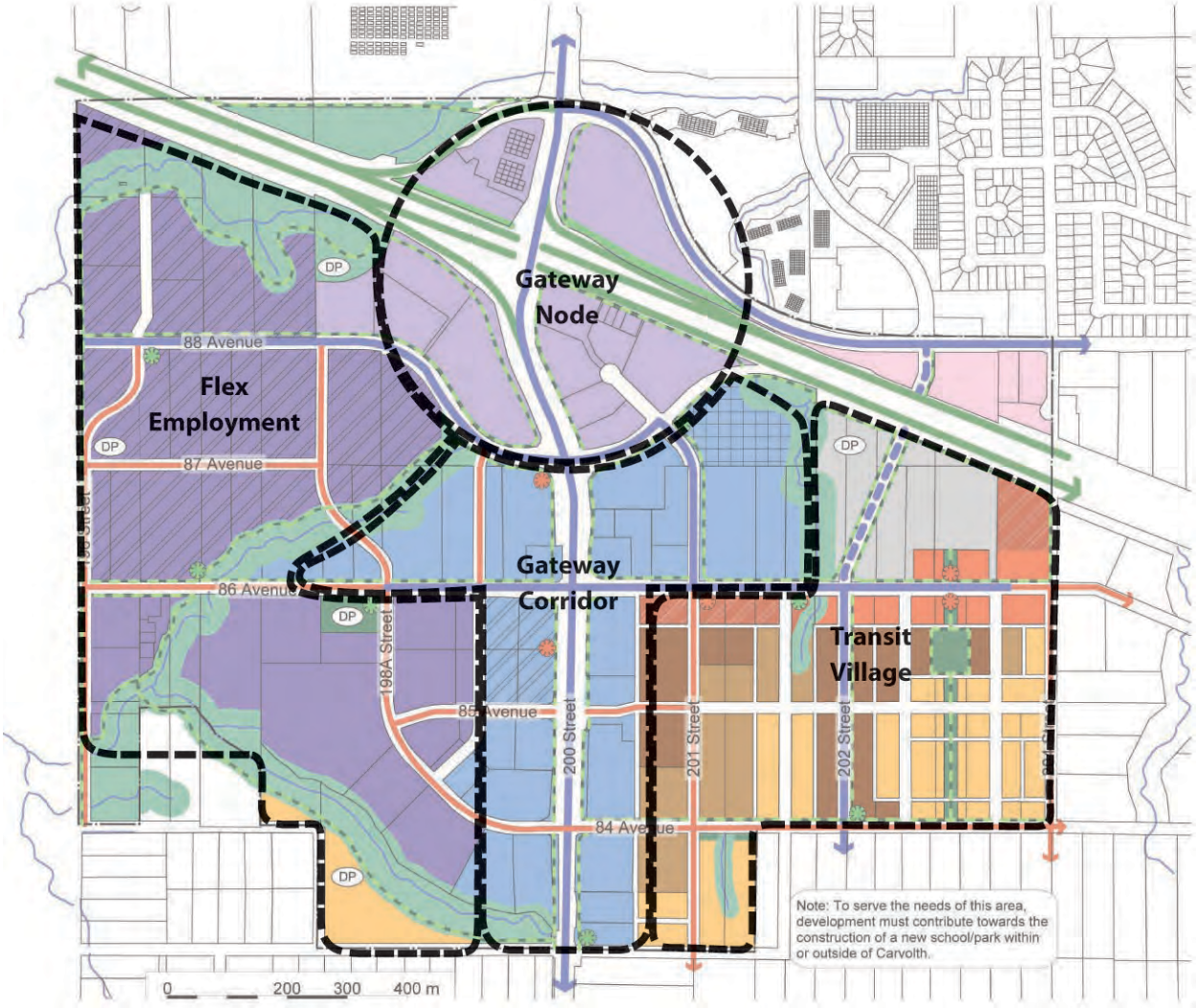


Figure 81. Map of Character Areas.

Figure 82. Illustrative Concept Plan: Gateway Node.

Figure 83. View of Carvolth Gateway Looking West From Highway 1.

3.5.1 Gateway Node

The subject planning area, or 'node', is comprised of properties adjacent to the 200 Street Interchange at Carvolth. The location presents a significant opportunity to evoke a strong sense of arrival to this emerging community within the Township of Langley BC. The vehicle interchange is a strategic access point to the Township from the regional transportation network. Approximately 80,000 vehicles travel through this interchange every day and for many visitors it is their first impression of the community.

It is intended that the area adjacent to the roadway interchange be developed as an urban Gateway. It will serve as a landmark that builds anticipation and celebrates arrival at Carvolth. Thoughtful urban design can improve the quality of experience and convenience of a street and a district. It can establish the physical character of Carvolth as a unique and definable place. Its image and identity can be partially formed by the placement, scale and architectural design of the buildings, open spaces and streetscapes.

The composition and aesthetics of these elements can visually communicate the transition from highway to urban community. Along with individual expressive components overlaid on the buildings and spaces, the initiatives and activities of the people living and working Carvolth will animate the place and provide visual cues to motorists of a vital commercial, cultural and pedestrian- friendly precinct.

To achieve the visual qualities and experience of an urban gateway, start with the following:

- Site prominent buildings with signature architecture in areas of key visibility. Design gateway buildings to emphasize the focal nature of these locations.
- Maintain a minimum facing distance between tall buildings of 35 m to ensure adequate light, air and views.
- Orient buildings so that they present an attractive facade toward the highway.
- Utilize buildings and landscaping to effectively screen large parking areas, service and loading areas.
- Where possible buildings should be aligned parallel to the street. At intersections, buildings should be placed at or near the sidewalk of both streets to "hold the corner."
- Provide visual design cues to motorists that they are entering an area with higher pedestrian activity (i.e., change in paving patterns, narrower lane $_{\text{widths}}$, street trees etc.).

Figure 84. Illustrative Concept Plan: Gateway Corridor.

Figure 85. View of Carvolth Gateway Corridor along 200 Street.

3.5.2 Gateway Corridor

The 200 Street corridor between 88 Avenue and 83 Avenue is intended to be a high quality employment node and urban gateway into the Township of Langley. It is intended as part of a major transit oriented, high density, mixed use corridor along 200 Street, building on the existing office mixed use developments already located here and the status of 200 Street as part of TransLink's Frequent Transit Network.

The gateway corridor will allow corporate headquarters and business and professional offices to locate in a contemporary business park with complimentary commercial facilities and other amenities that support the employment area. It will be a high quality, well designed business park at this major gateway that will stimulate and promote economic growth in the Township.

Office-Mixed Use Design Guidelines

- Provide a high standard of building and site design appropriate for a prestigious business park.
- Promote a development form which is sensitive to the natural environment and creates new natural features which can become part of the parks and open space network.
- Create visually attractive streetscapes and views along 200 Street.

Figure 86. Illustrative Concept Plan: Transit Village.

3.5.3 Transit Village

The Carvolth Transit Village is comprised of a compact mix of housing, local shops and services, parks and plazas. An interconnected network of pathways, pedestrian streets and greenways creates safe, attractive and accessible pedestrian and cycling connections to the Carvolth Transit Exchange, local shops and services, and the employment node/Frequent Transit Corridor along 200 Street.

Residential Buildings:

- Site and orient townhouses and apartments to overlook public streets, parks, walkways, and communal spaces, while ensuring the security and privacy of residents.
- Ground floor residential uses should emphasize ‘doors on the street’ by incorporating individual entrances to ground floor units in residential buildings that are accessible from the fronting street. This provides easy pedestrian connections to buildings, encourages street activity and walking, and enhances safety.
- Residential entries should be clearly visible and identifiable from the fronting public street to make the project more approachable and create a sense of association amongst neighbours.
- Set back residential buildings on the ground floor by a minimum of 2 m and a maximum of 4 m, and elevate by a minimum of 0.6 m to create a semi-private entry or transition zone to individual ground floor units. For these units, ensure an alternate access point that is accessible by wheelchair (as required by the B.C. Building Code).
- A landscaped transition zone in between the entryway and public sidewalk should be considered on streets with high traffic volumes.

- Apartment lobbies and main building entries shall be clearly visible from the fronting street with direct sight lines into them. Where possible, apartment lobbies should have multiple access points to enhance building access and connectivity with adjacent open spaces.
- Lobbies and main building entries should be clearly visible from the street, and have direct sight lines into them. Seating in the lobby should be provided to ensure people with mobility issues have a comfortable secure place to sit while waiting for rides.
- Incorporate lobbies with multiple access points to enhance building access and connectivity with adjacent open spaces.

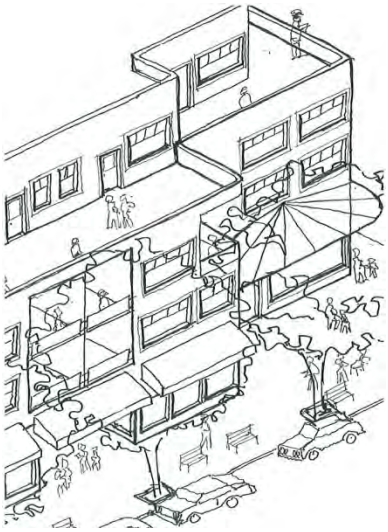
Human Scale:

- The design of new buildings and renovated existing buildings should express a unified architectural concept that incorporates both variation and consistency in façade treatments (for example, by articulating façades into a series of intervals).
- Design buildings to express their internal function and use.
- Incorporate into building façades a range of architectural features and design details that are rich and varied to create visual interest when approached by pedestrians.
- Examples of architectural features include:
  - » Building height, massing, articulation and modulation.
  - » Bay windows and balconies.
  - » Corner features accent, such as turrets or cupolas.
  - » Decorative rooflines and cornices.
  - » Building entries.
  - » Canopies and overhangs.
- Examples of architectural details include:
  - » Treatment of masonry (ceramic tile, paving stones, brick patterns, etc.).
  - » Treatment of siding (for example, the use of score lines, textures, and different materials or patterning to distinguish between different floors).
  - » Articulation of columns and pilasters.
  - » Ornament or integrated artwork.
  - » Integrated architectural lighting.
  - » Detailed grilles and railings.
  - » Substantial trim details and moldings.
  - » Trellises and arbors.

Figure 87. Architectural details and features help to create visual interest when approached by pedestrians.

Figure 88. Architectural features and details combined in a simple and pleasing composition.

- Locate and design entrances to create building identity and to distinguish between individual commercial and/or residential ground floor units. Use a high level of architectural detail and, where appropriate, landscape treatment to emphasize primary entrances and to provide “punctuation” in the overall streetscape treatment.
- Design balconies as integral parts of buildings and to maximize daylight access into dwellings through the use of glazed or narrow metal spindle guardrails.
- Clearly distinguish the roofline from the walls of buildings (for example, through the use of a cornice, overhang, or decorative motif).



Windows and Doors

- Windows can be used to reinforce the human scale of architecture by incorporating individual windows in upper storeys that:
  - » Are vertically proportioned and approximately the size and proportion of a traditional window.
  - » Include substantial trim or molding.
  - » Are separated from adjacent windows by a vertical element.
  - » Are made up of small panes of glass.
  - » Are separated with moldings or jambs but grouped together to form larger areas of glazing.
- The use of figured or frosted glass or tinted glazing is discouraged for windows facing the street except for compatible use of stained glass or where figured or frosted glass comprises a maximum 20% of the glazing. This creates a welcoming, visually interesting and transparent street frontage.

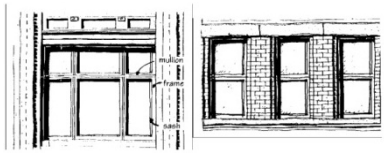


Figure 89. Punched windows with vertical proportions create variation and texture in the façade and help achieve a human scale.

Exterior Materials

- A key objective is to encourage the use and expression of wood as a renewable resource. This can be achieved through the use of wood in façade design and the architectural expression of buildings.
- In general, new buildings should incorporate natural building materials into façades to avoid a “thin veneer” look and feel, incorporated with more modern treatments, including glass curtain walls for office buildings.

The following materials are recommended, acceptable, or discouraged for use:

- Recommended:
  - » Natural wood materials, including:
    - Milled and un-milled timbers.
    - Window and door trim.
    - Canopy structures and signage.
  - » Brick masonry, glazed tile, stone, concrete (painted).
  - » Flat profile “slate” concrete tiles.
  - » Glass and wood for window assemblies.
  - » Standing seam metal roofing.
- Acceptable:
  - » Pre-finished metal, non-corrugated type, emphasizing either vertical or horizontal arrangements but not both.
  - » Limited amounts of stucco.
- Discouraged:
  - » Vinyl siding or window frames.
  - » Swirl Type Stucco.

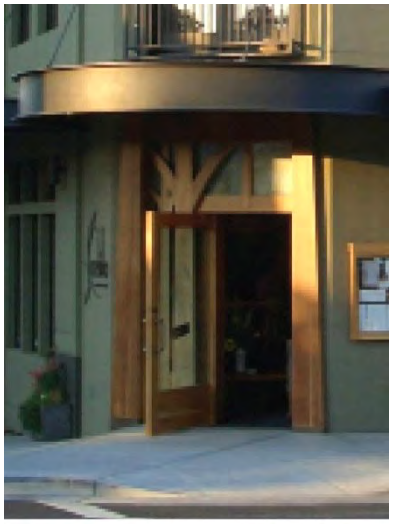


Figure 90. Tasteful use of timbers integrated with a range of complimentary colours and materials.

Landscaping

- Landscaping should be used to create a positive interface between buildings and streets by using perennials, shrubs, and trees to soften buildings, where appropriate.
- Hard landscape treatments such as terraced retaining walls and planters should be used to transition between grades, where necessary. The following are preferred approaches for achieving this guideline:
  - » Incorporate a planter guard or low planter wall as part of the building design.
  - » Use distinctive landscaping in open areas created by building articulation.
  - » Include a special feature such as a courtyard, fountain, or pool.
  - » Emphasize entries with special planting in conjunction with trellises, decorative paving and/or lighting.

3.5.4 Flex Employment

This area provides future capacity for employment uses. It is constrained by the Agricultural Land Reserve (ALR) to the west, Highway 1 to the north and Latimer Creek to the south. Access within and through this area is highly constrained therefore it is important to carefully consider traffic impacts of new development.

Light industrial development is preferred in this location because it is a fairly low intensity land use and generates less traffic than office, retail and residential uses. There is provision for an Outlet Distribution Centre in this area but any development of this type would require a detailed traffic impact assessment and management plan and would need to conform to the design guidelines outlined in this plan.

Parking is tucked in behind buildings but lacks pedestrian circulation and plantings.

Better surface parking design includes pedestrian connections throughout and extensive plantings.

Flex Employment II - Outlet Distribution Centre

The intent of these guidelines is to provide direction on the development of a potential Outlet Distribution Centre in the Carvolth area. These guidelines emphasize a higher quality, more pedestrian oriented design that integrates large format retail into the surrounding context and provides amenities for the adjacent community.

Any development in this zone should adhere to the general design guidelines in Section 3.2 of this document. Where the type of land use presents additional challenges the following guidelines should be used to supplement the general guidelines.

- Any inward-looking, pedestrian-oriented circulation must be counter-balanced with a strong outward facing relationship between the development and the adjacent street network. Buildings must present a ‘friendly face’ to the street in addition to any internal ‘high-street’ condition that may be desired.
- Large surface parking lots should be avoided where possible. Where it is not possible, parking lots must be broken up with plantings and a clear, direct and defined (i.e., with different paving material) pedestrian network must be incorporated into the parking area to provide access between where people park and where they will enter the Outlet Distribution Centre.
  - » Orient parking pattern to allow for logical pedestrian circulation from parking area to buildings.
  - » Provide preferential parking close to buildings for clean or alternative fuel vehicles, carpool, co-op cars, families and handicap person’s vehicles.

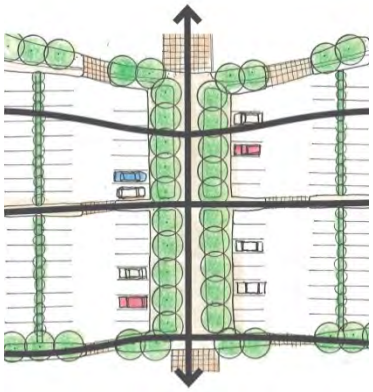


Figure 91. Strong pedestrian connections improve safety and accessibility and large planted areas break up the visual impact of the surface parking and provide opportunities for on-site infiltration.

Figure 92. Facade articulation and variation of the building height help to define the main entrance and reduce the visual impact.

  - » Provide trees in planting strips and parking lot islands to provide shade and minimize the heat island effect.
  - » Direct runoff to landscape filter strips, bioswales and/or rain gardens within or adjacent to parking areas.
  - » Use permeable materials to increase infiltration of stormwater into soils.
  - » Install oil/water and soil/grit separators in the storm drainage system within parking areas.

- Provide a scale transition between existing large format retail buildings and their surrounding streets and adjacent properties to minimize the visual bulk of developments and/or create a street frontage by “wrapping or capping” a larger retail unit with smaller retail units that front the street edge or units directly around the existing building.

- Corner elements are required at major intersections and at the end of streets to ensure street definition is maintained.
- New development should address streets and other public spaces using entrances, windows and patios that are clearly visible from and, where appropriate overlook, public sidewalks and open spaces.

- Modulation of building facades at grade level should be used to enable street activity.
- Commercial buildings should be located to the edge of the sidewalk with parking located underground or in the rear.
- Ensure clear sight lines and accessible grades from the public sidewalk to the primary building entrance.

- Buildings should be sited in a manner that provides safe, attractive and accessible pedestrian networks that supplement the streetscape network.
- Public seating areas, nodes and gathering places should be appropriately scaled and located logically in relation to buildings and the overall pedestrian circulation network. Provide spatial definition and character through landscape elements and building facades while carefully considering climate and sun orientation.
- Locate loading bays, reduce, recycling, service and maintenance areas so they are easily accessible but not prominent from commercial entries or the street.
- Provide non-compacted soil and subsoil (30 cm) in landscape areas designed to absorb stormwater and to ensure healthy plant growth.
- Design and construct roofs to detail stormwater and capture and use rainwater for landscape irrigation.