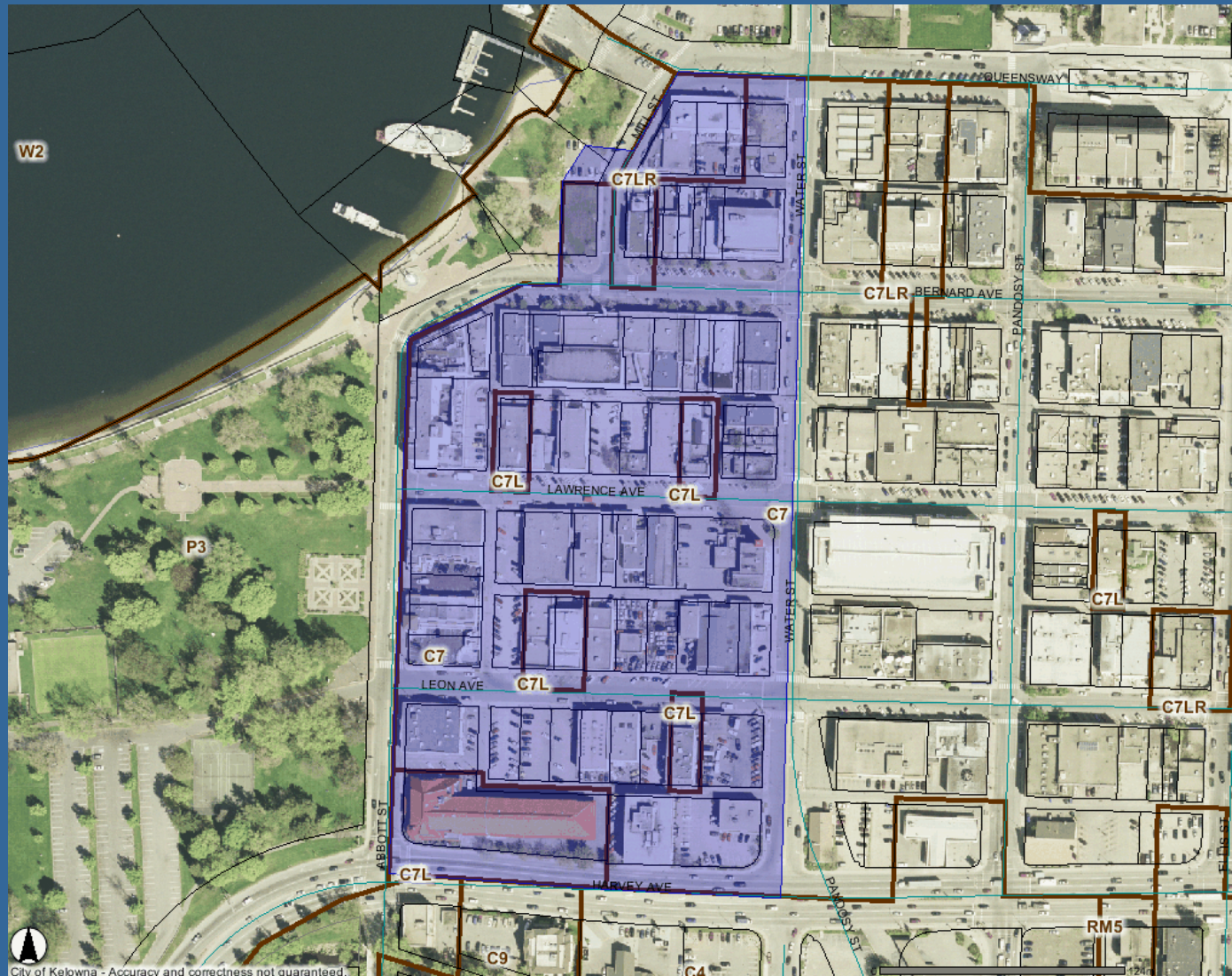




# Kelowna Downtown Rethinking, Remaking, Reinventing

PUBLIC HEARING PRESENTATION  
OCTOBER 20, 2008

# CD-21 Zone Boundary

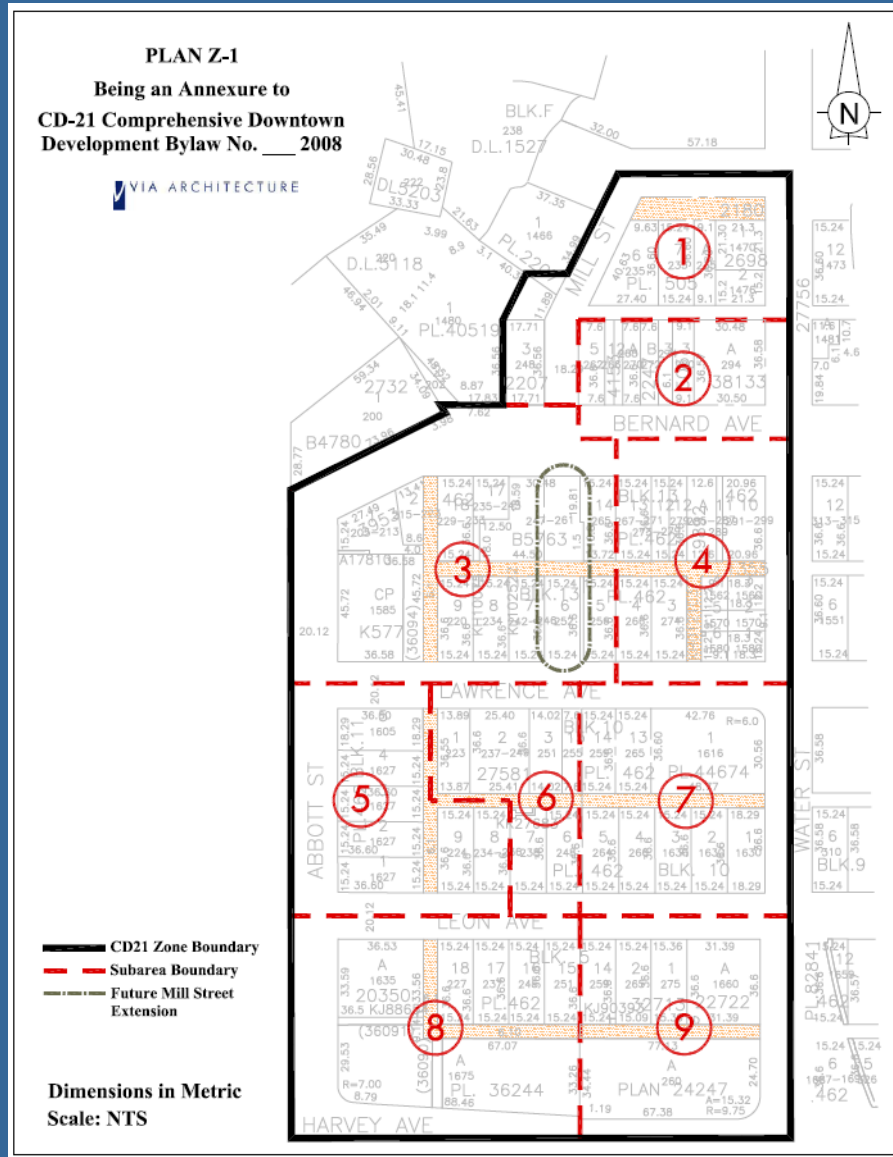




# Subject Area



# CD-21 Zone Boundary





# A COMMUNITY VISION





# A COMMUNITY VISION





# AGENDA

- The Concept
- The Detail
- The Areas of Interest





# AGENDA

## Specific Interests:

- Site Preparation
- Park Enhancements
- Land Exchanges
- Heritage
- The Greater Downtown
- Sustainability
- Affordability
- District Energy





# THE TOOL (CD ZONE)

1. Ensure Complementary Uses
2. Foster Amenity Creation (\$22 million)
3. Infrastructure Cost Sharing
4. Parking Efficiency & Active Streets
5. Determine Appropriate Massing



# THE TOOL (CD ZONE)

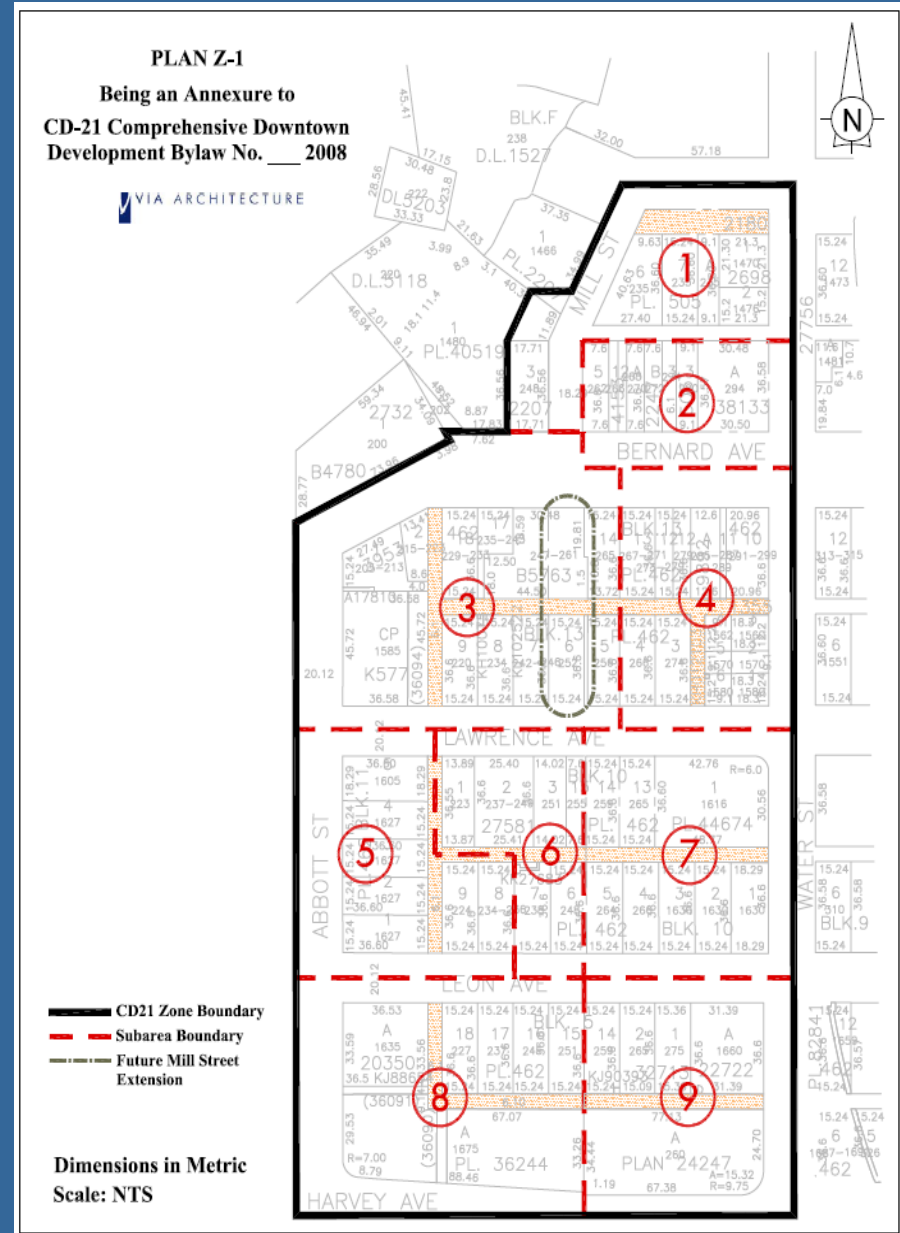
6. Preserve View Corridors & Solar Access
7. Create Certainty
8. Quality of Design Controls
9. Supports sustainable design – Social, Economic & Environmental





# THE HIGHLIGHTS

- Some assembly required
- Density Bonusing
- Amenities \*\*
- Heritage
- Existing C7



VIA ARCHITECTURE

# A COMMUNITY VISION



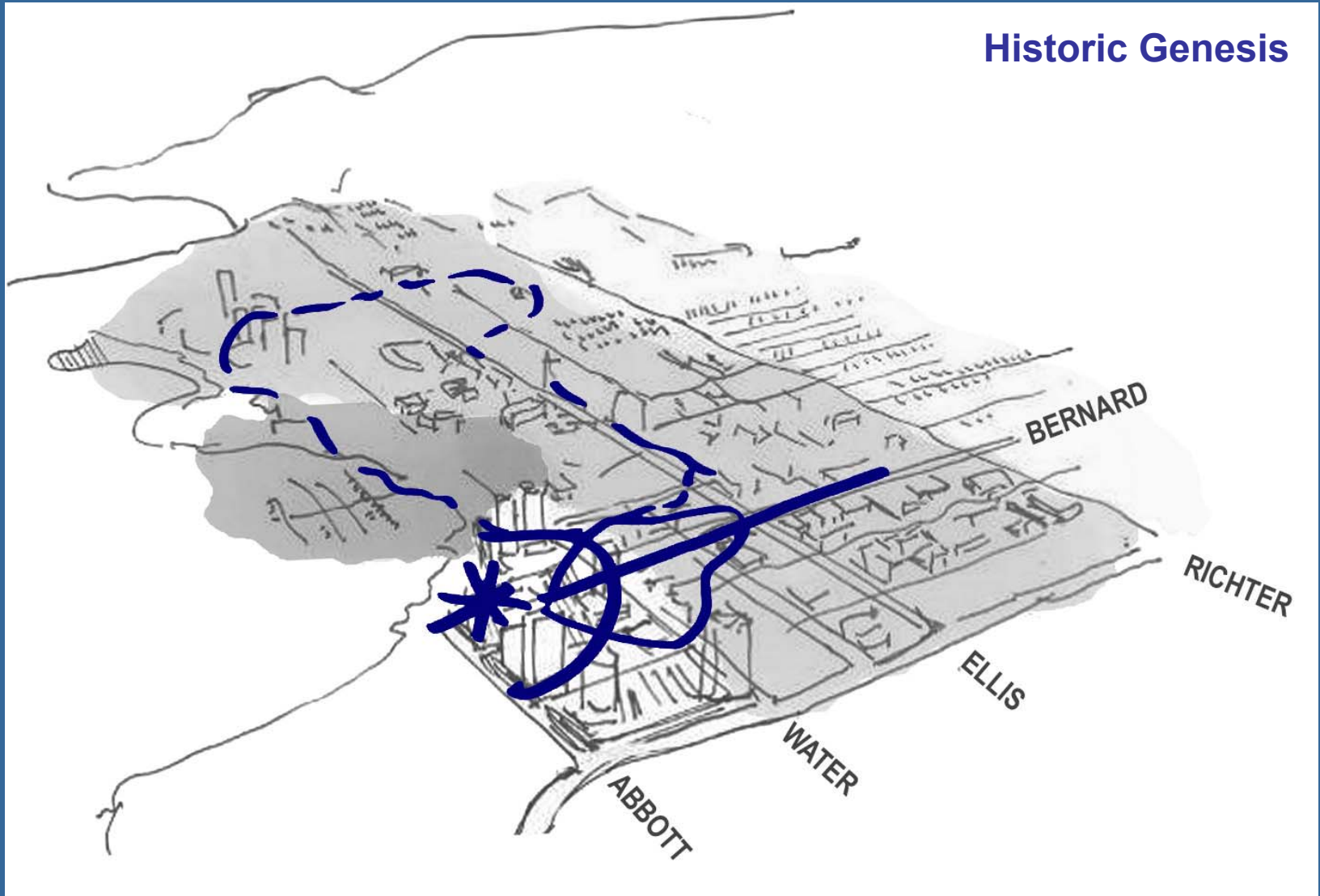


# Envisioning Future Perspectives for Kelowna



# Planning Context

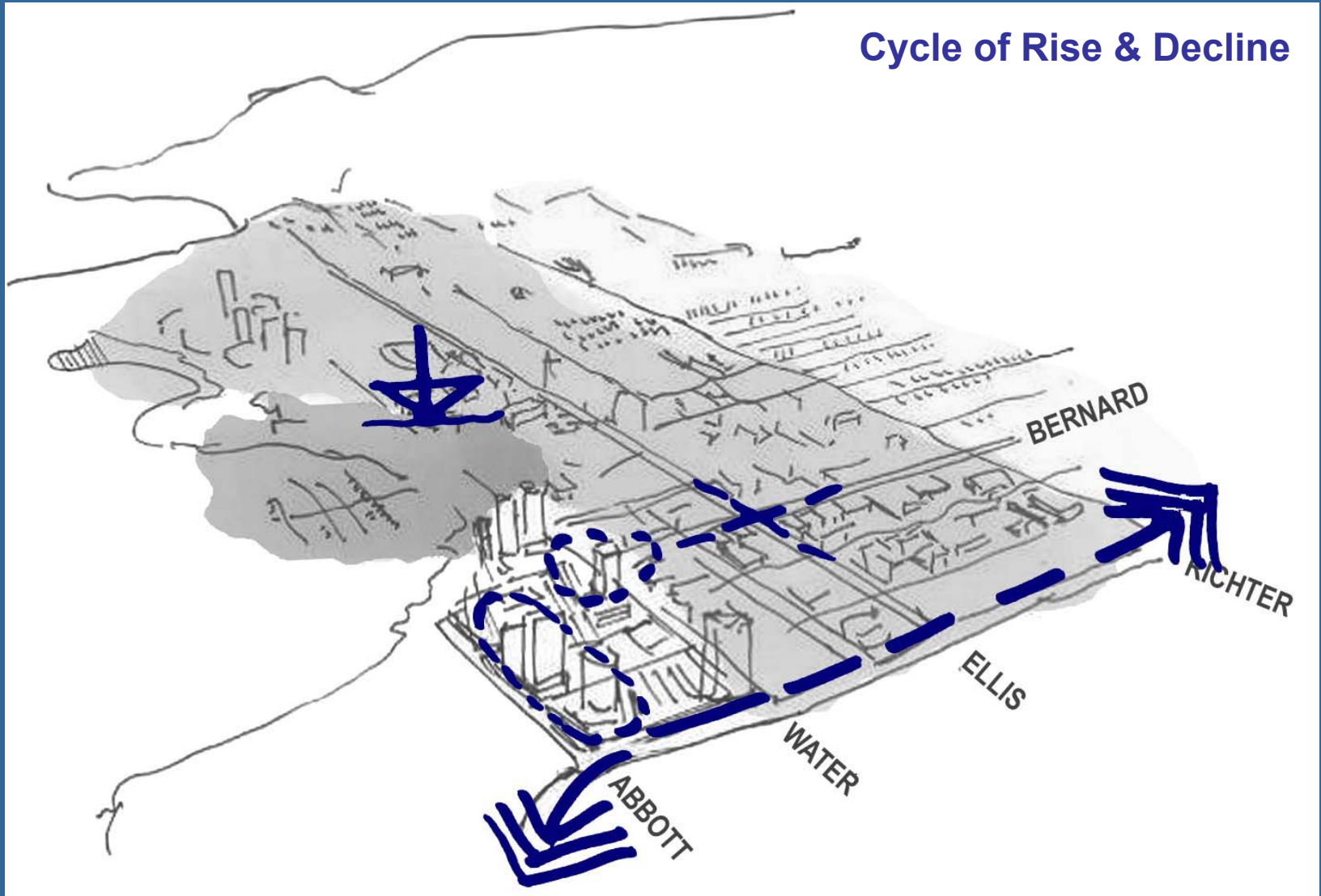
## Historic Genesis





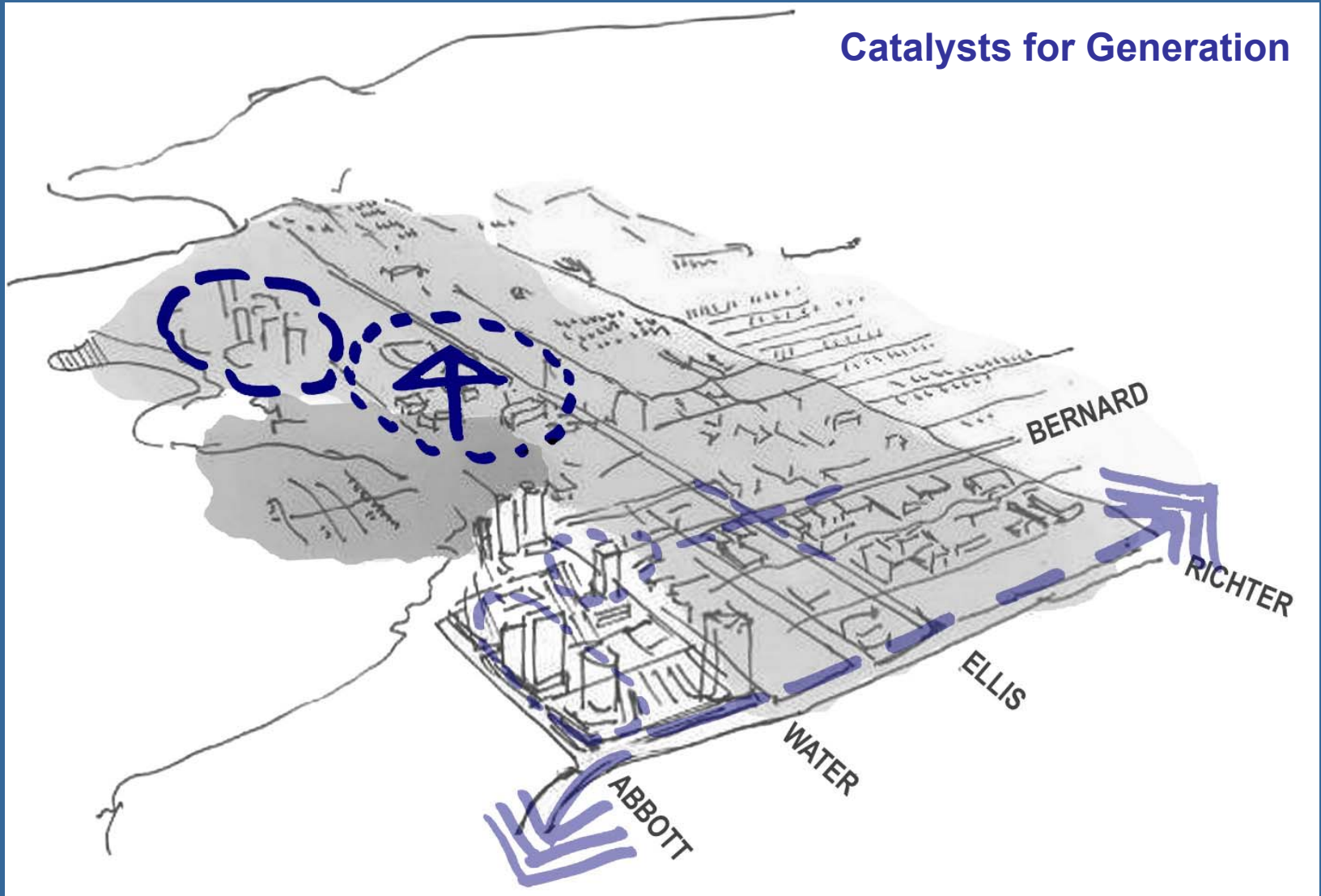
# Planning Context

## Cycle of Rise & Decline



# Planning Context

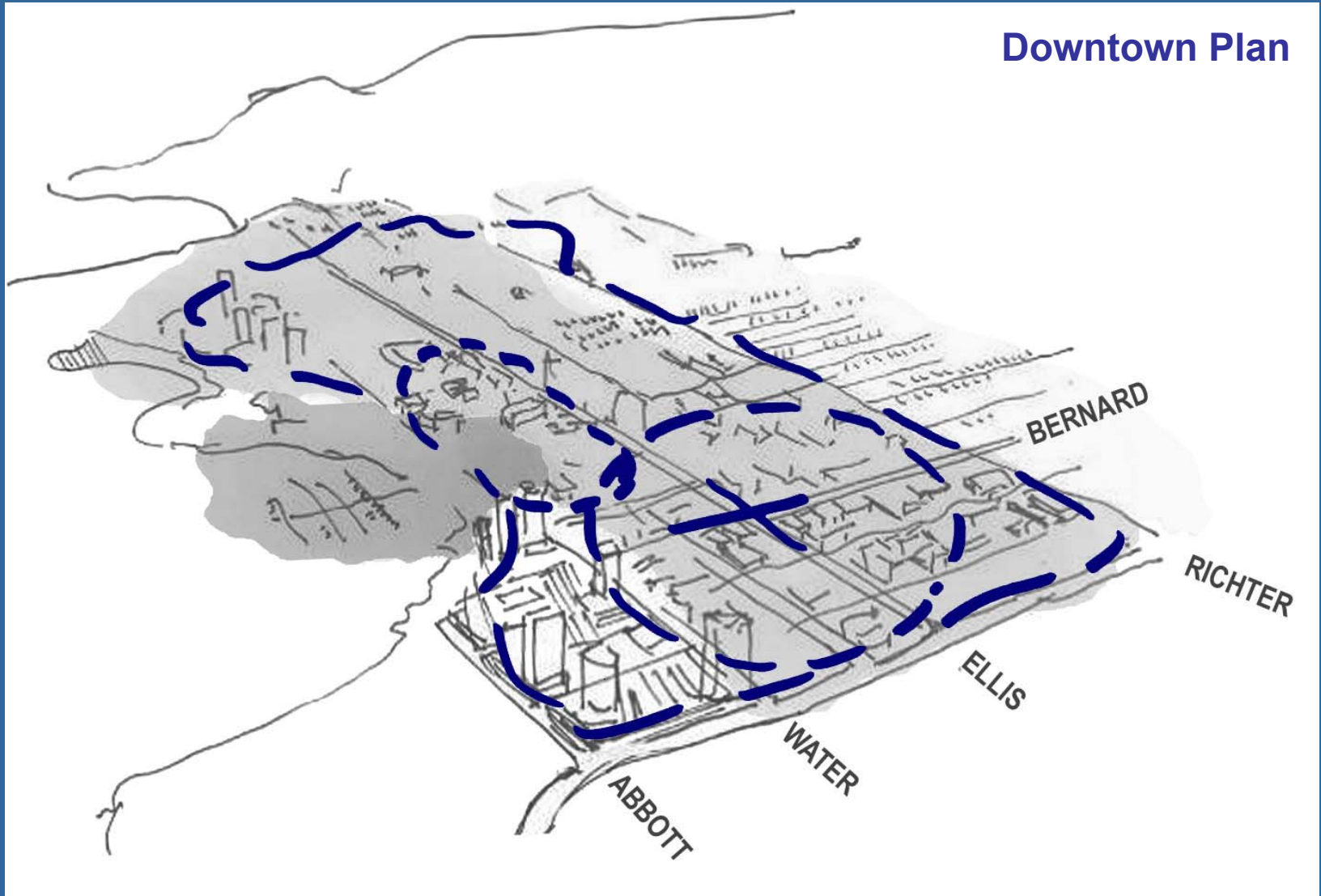
## Catalysts for Generation





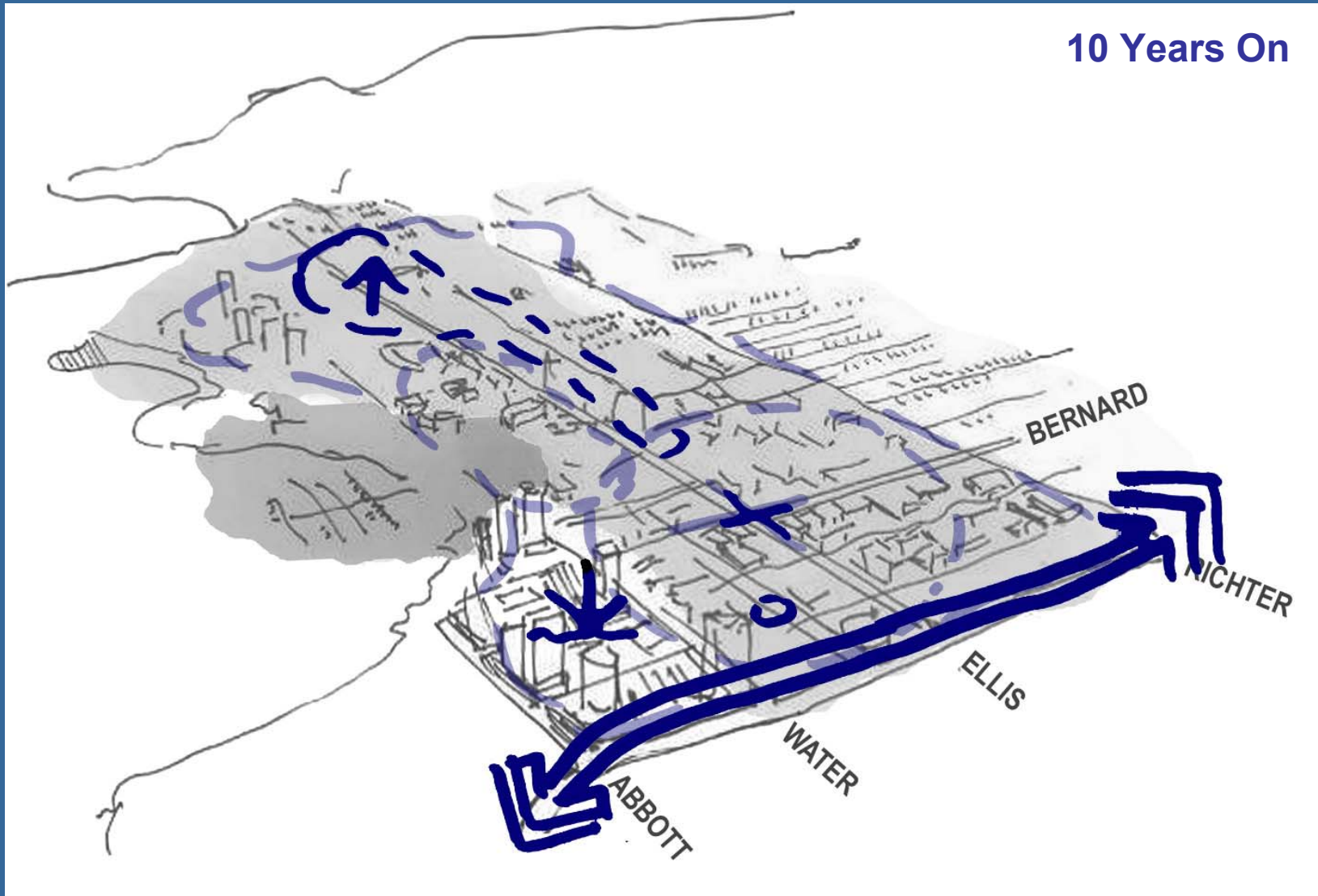
# Planning Context

## Downtown Plan



# Planning Context

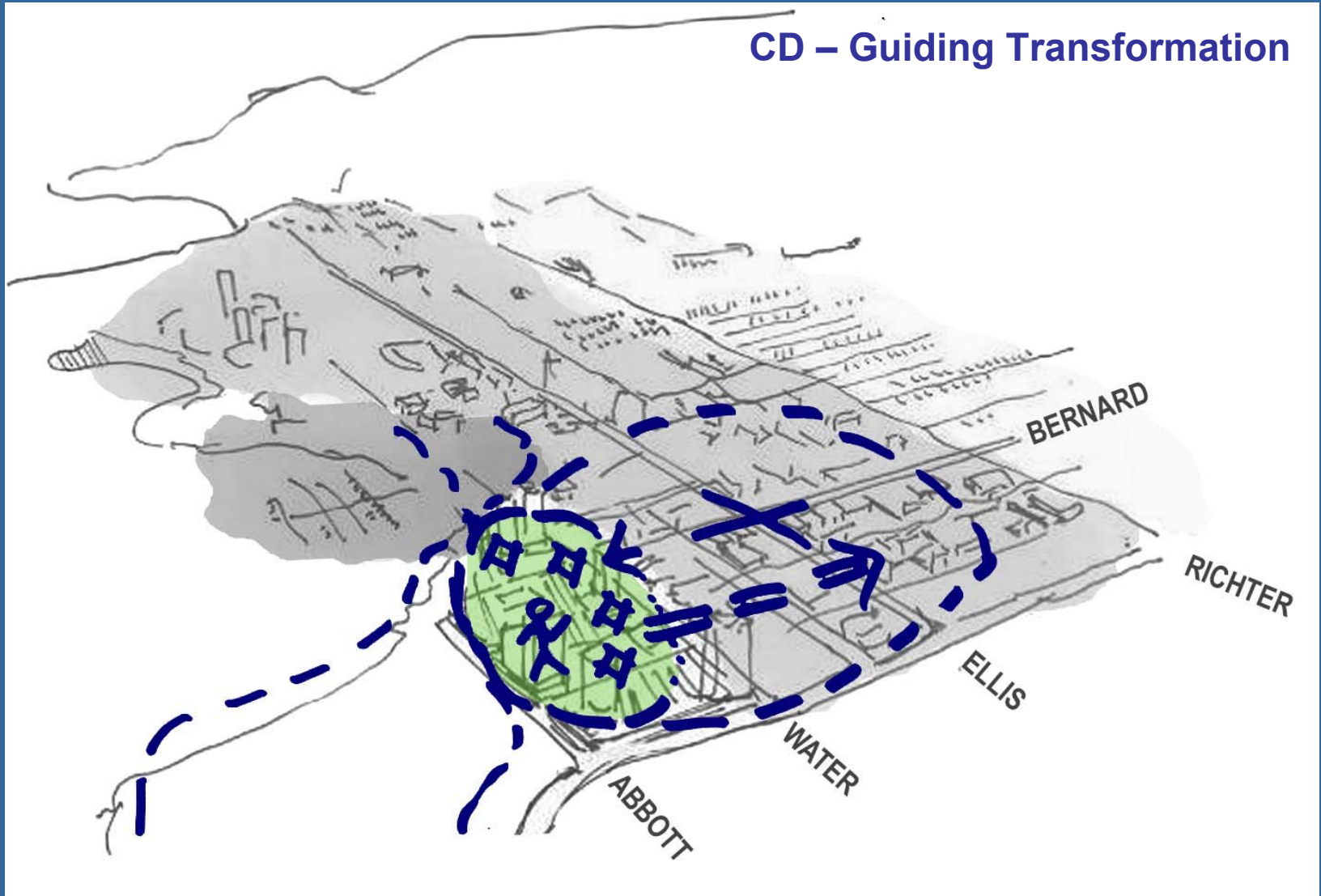
# 10 Years On





# Planning Context

## CD – Guiding Transformation

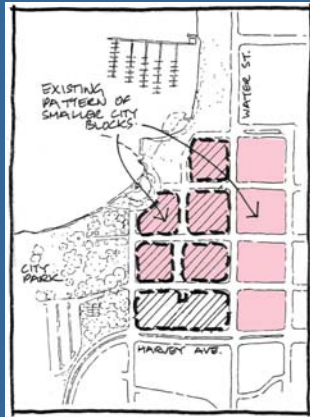


# Guiding Design Principles

## block structure

### Principle 1:

Downtown is about walking



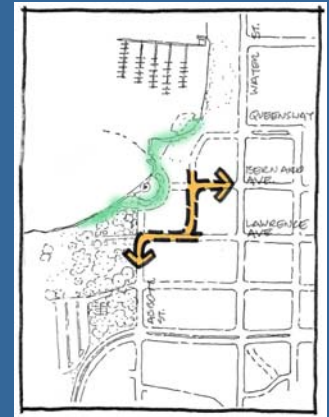
### Principle 2:

Enhance Harvey Ave. as a green gateway boulevard



### Principle 3:

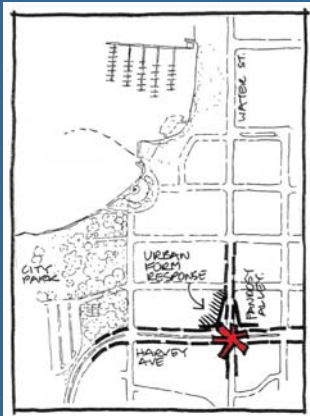
Connect Mill to Lawrence to redirect traffic from waterfront edge



## boundary influences

### Principle 4:

Plan Pandosy Harvey as a long term urban crossing



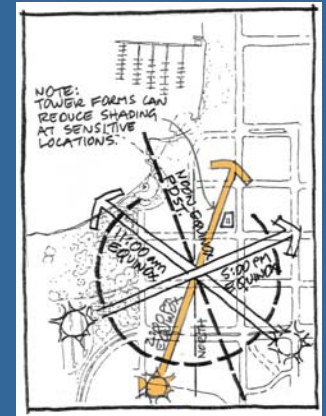
### Principle 5:

Use Abbott & Bernard as year-round amenity, not through traffic



### Principle 6:

Optimise Kelowna sunshine



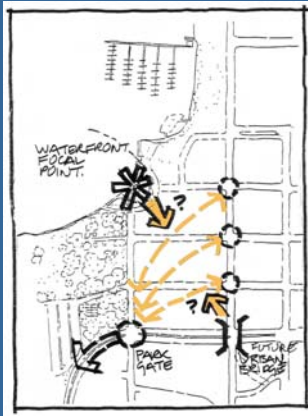


# Guiding Design Principles

## urban place making

### Principle 7:

Enhance diagonal pedestrian and vehicular patterns



### Principle 8:

Create a series of linked, memorable urban places



### Principle 9:

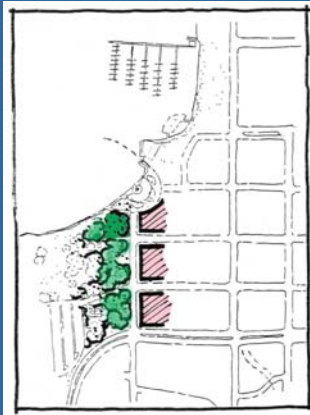
Knit public realm with a procession of focal points



## integrated continuity

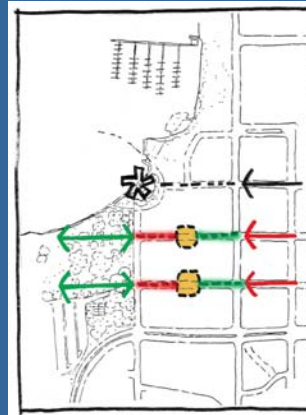
### Principle 10:

Highlight park/city interface



### Principle 11:

Bring City park and Downtown together

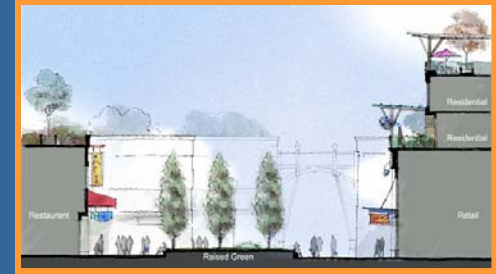
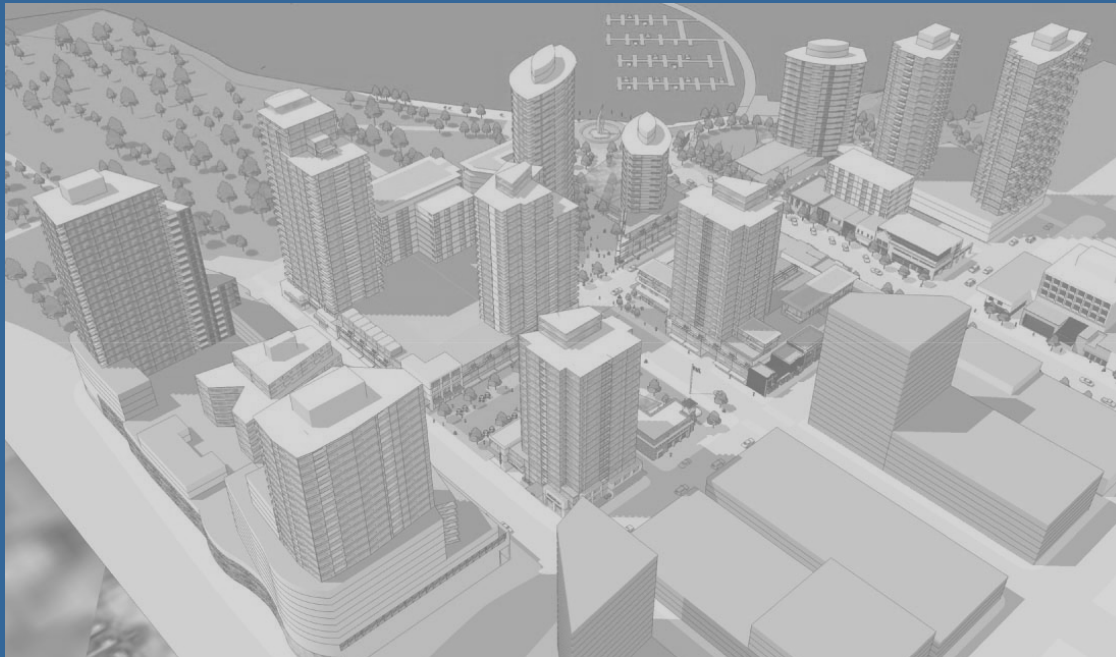
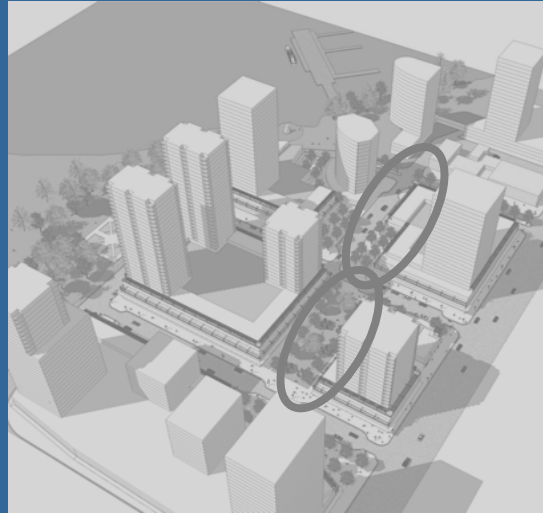
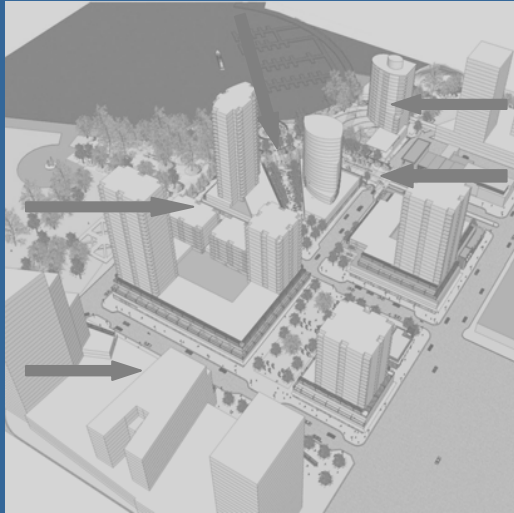


### Principle 12:

Reinforce heritage to serve the future



# Iterative Public Consultation Process



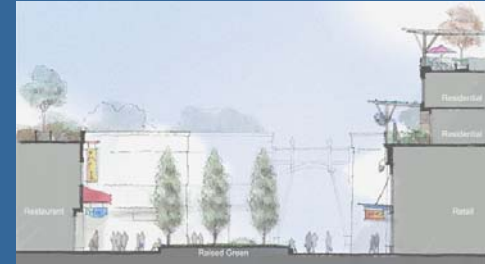
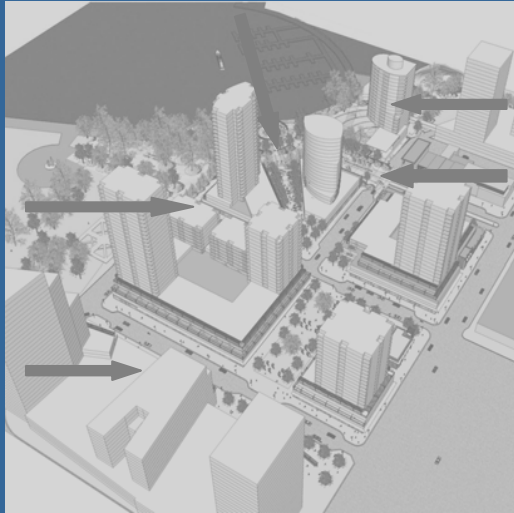
- **Open House**  
Sept 2007
- **Open House**  
Nov 6th 2007
- **Property Owners' Workshop**  
Dec 2007
- Council Presentation  
Feb 11th 2008
- Council & Community Workshops  
March 17th & 31st 2008
- Open House  
May 7th 2008
- Advisory Planning Commission  
June 25th 2008



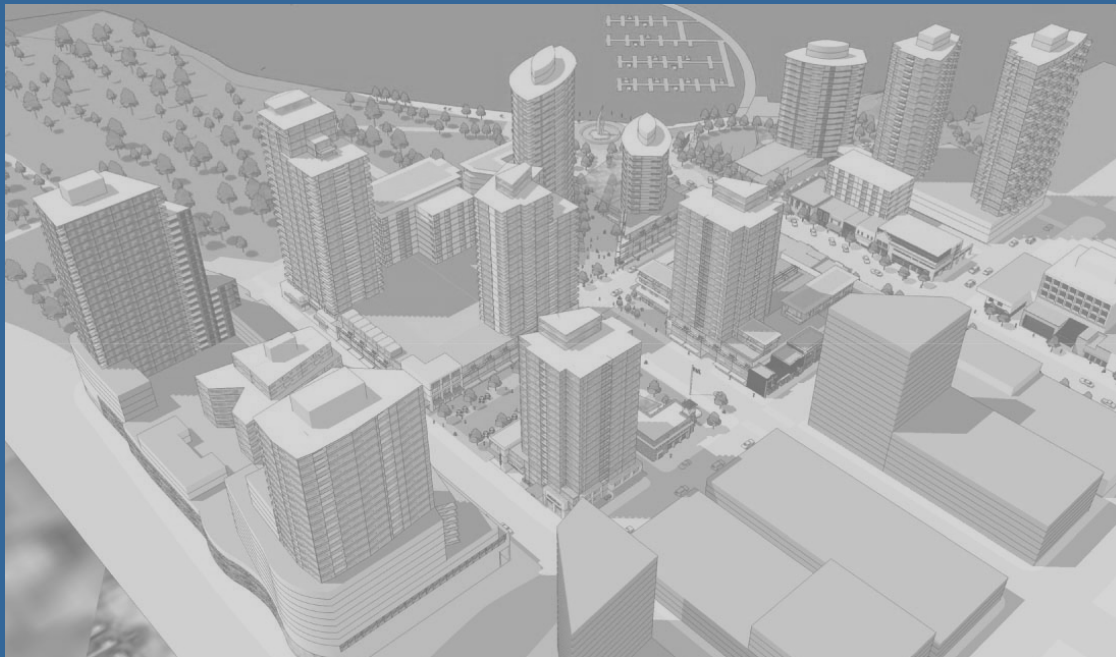
VIA ARCHITECTURE



# Iterative Public Consultation Process

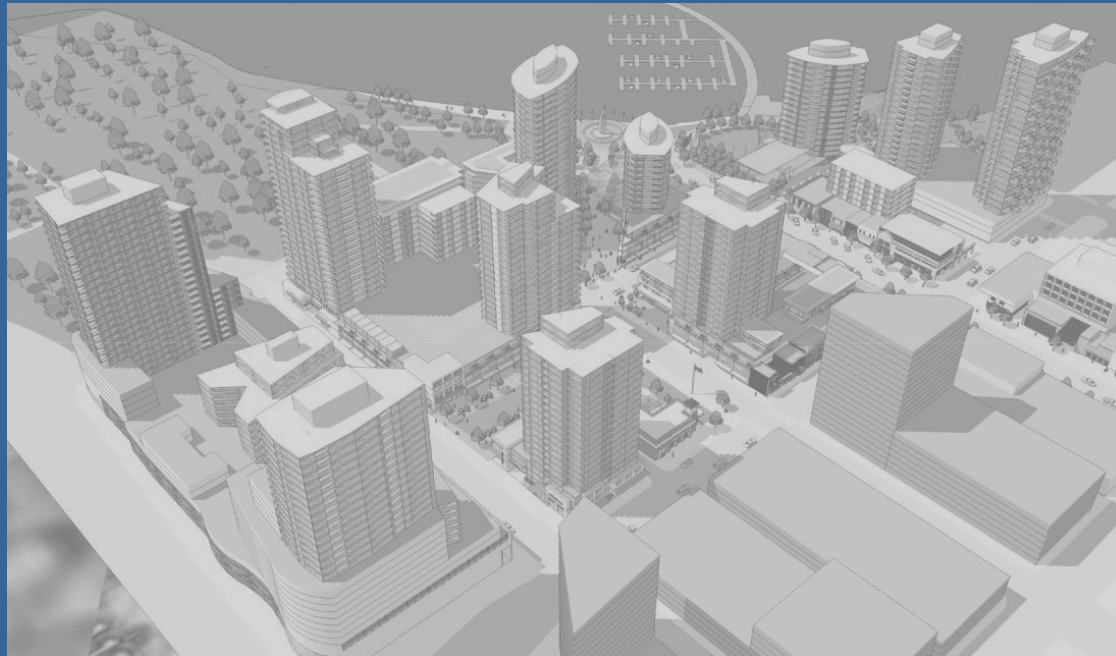
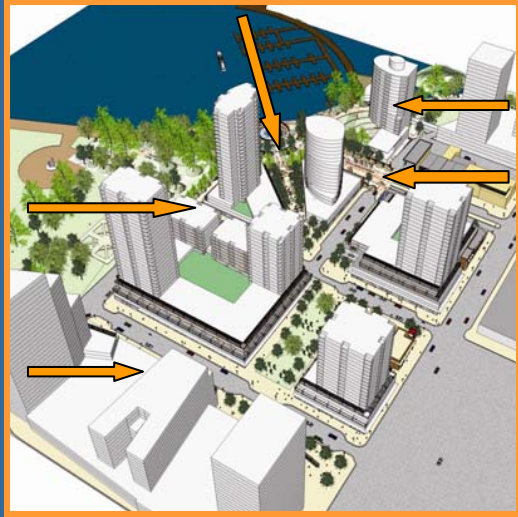


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VIA ARCHITECTURE

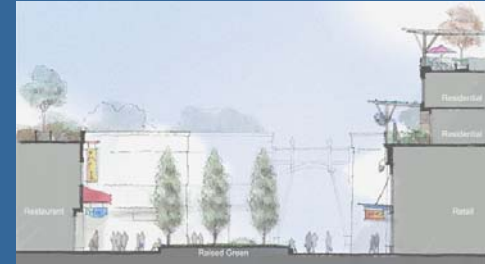
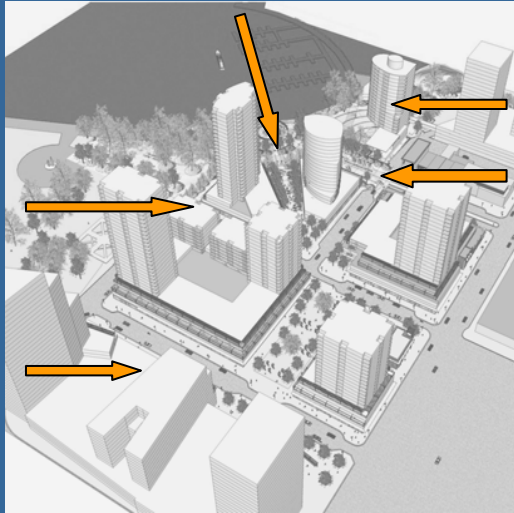
# Iterative Public Consultation Process



- Open House  
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# Iterative Public Consultation Process



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**June 25th 2008**



VIA ARCHITECTURE



# Iterative Public Consultation Product





# Sustainability – The Driver



“something happens because  
something happens because  
something happens”

# What sustains the here, here?



**C7**

**Automobile Priority**

*“get me out of here”*



**CD**

**Pedestrian Priority**

*“meet me here”*



# View close up - urban amenity for all



Public Pier

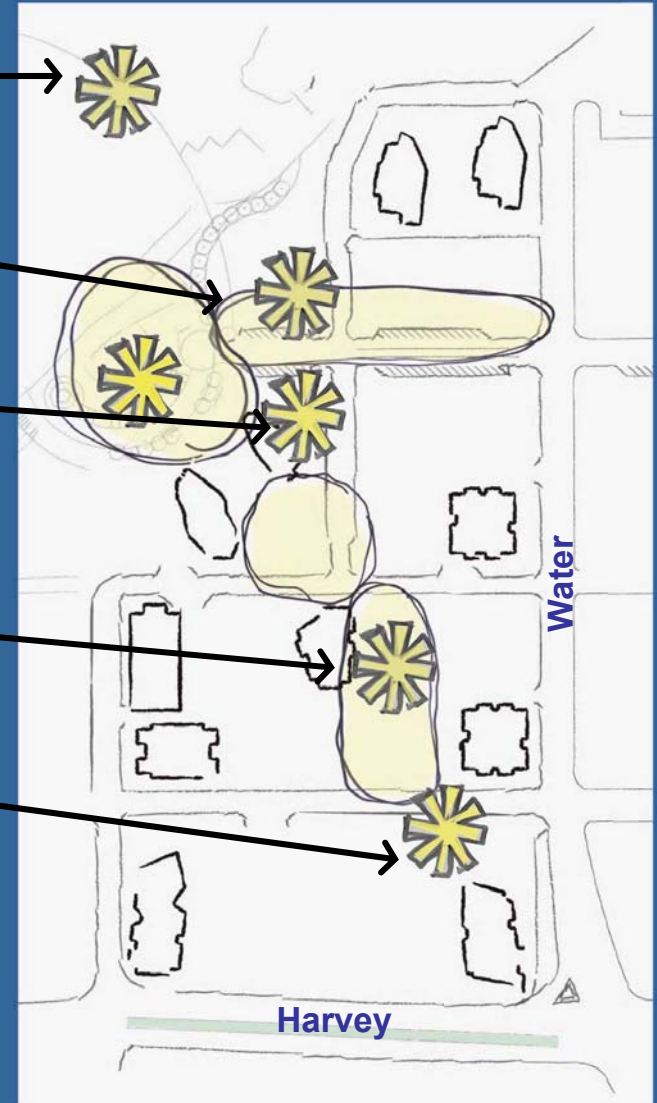
Community + Hotel  
Anchor Park "Portal"



Feet on the Street  
Live, Work, Play

Active Market Green

Grocery Store + Community Room



# View from afar — sustaining public health



Transit to get here

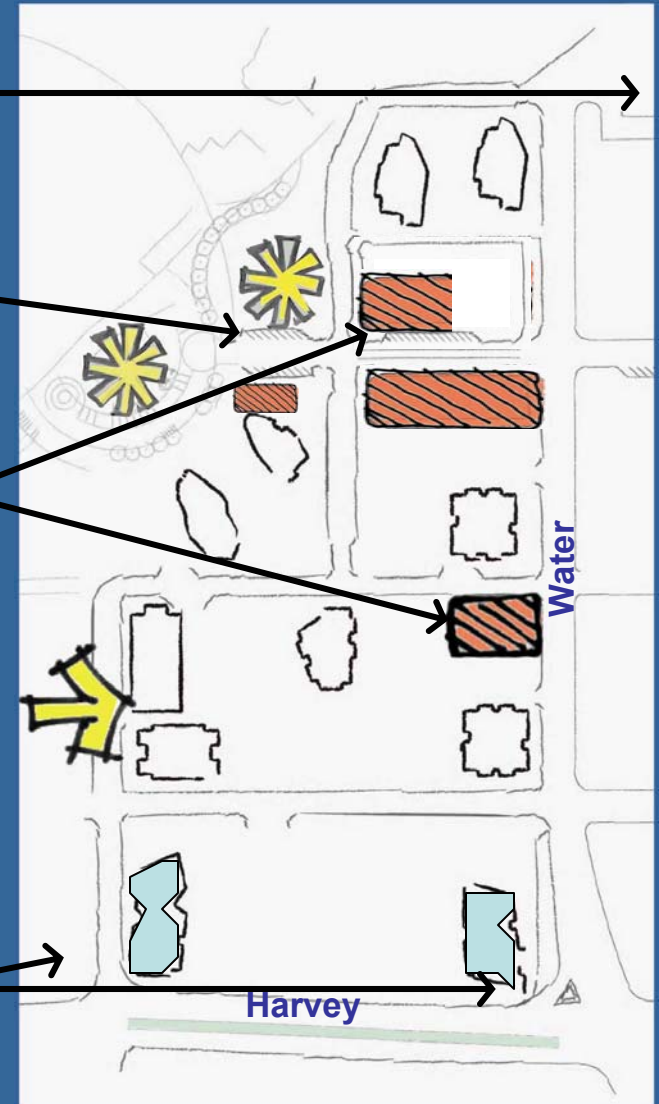
Year round reason  
to be here

Heritage Inspiration

Cafe./retail bring  
accessible jobs

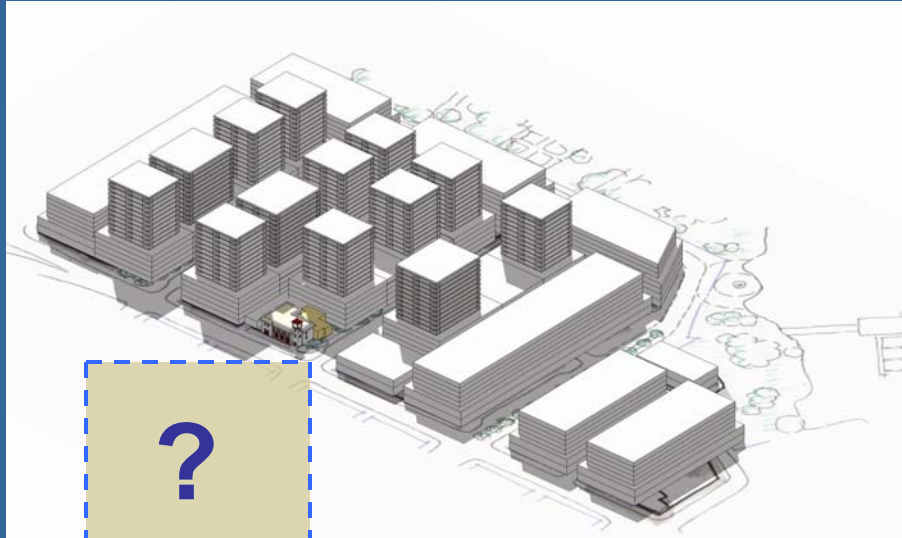
Residential eyes  
secure on the park

Office jobs focus at  
Harvey corners

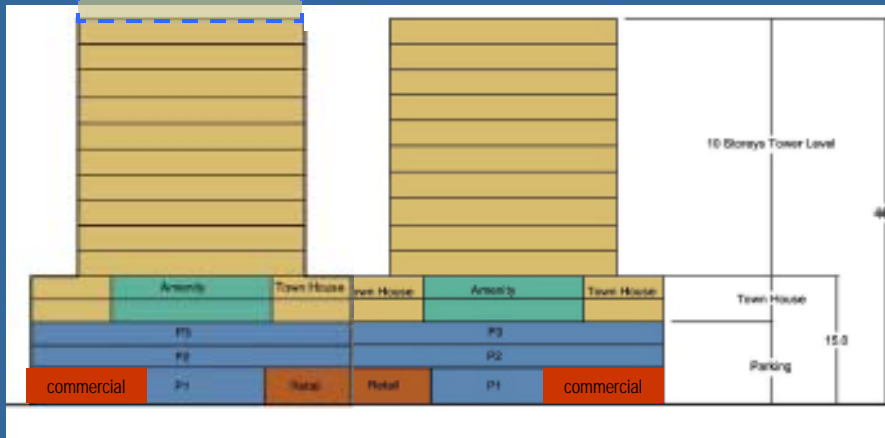




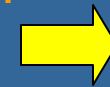
# How to get there



## C7 Existing Zoning



~~Existing Downtown Plan  
C7 Zoning~~



Comprehensive  
Development Zone

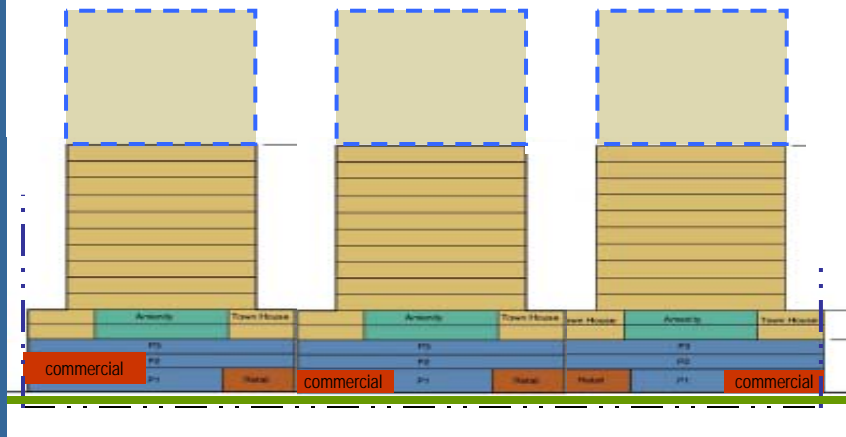


VIA ARCHITECTURE

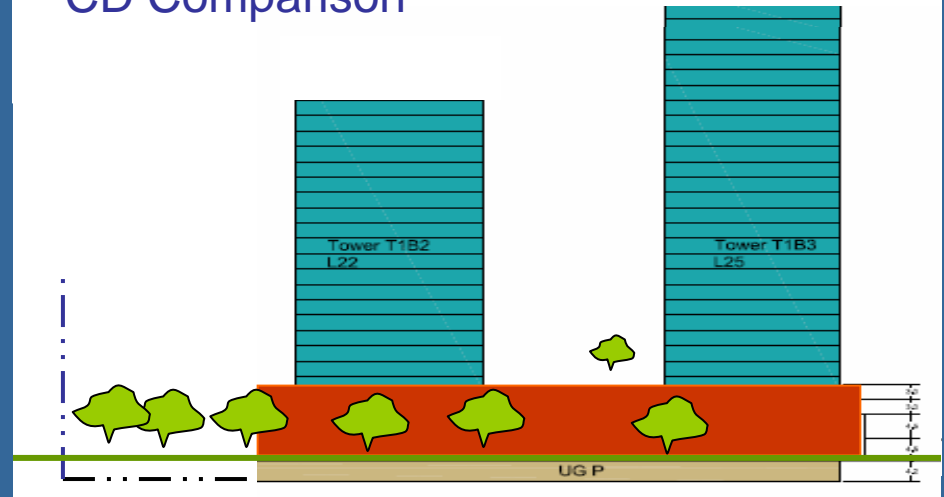
# Building Form:

## Understanding Height & Volume

### C7 Potential Build-out

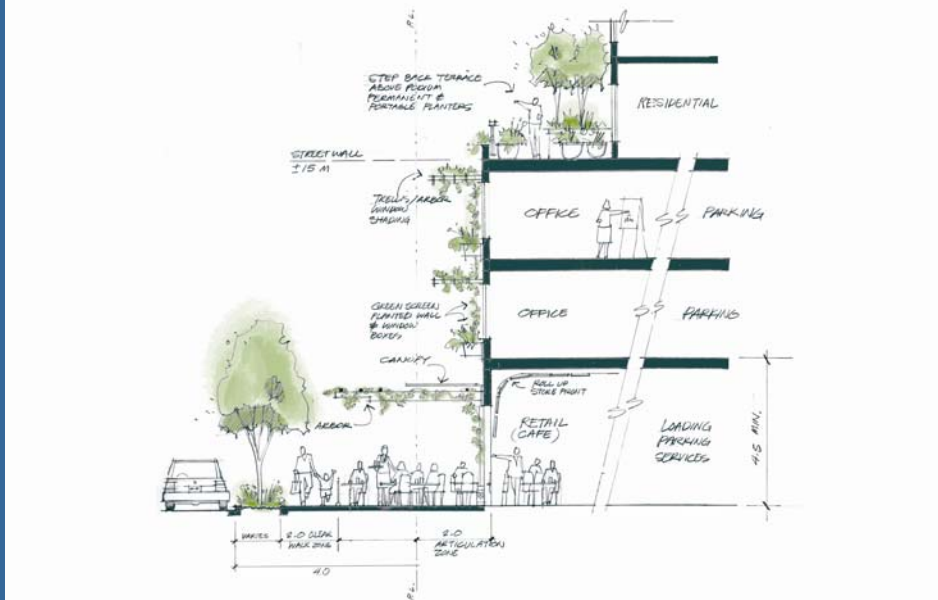
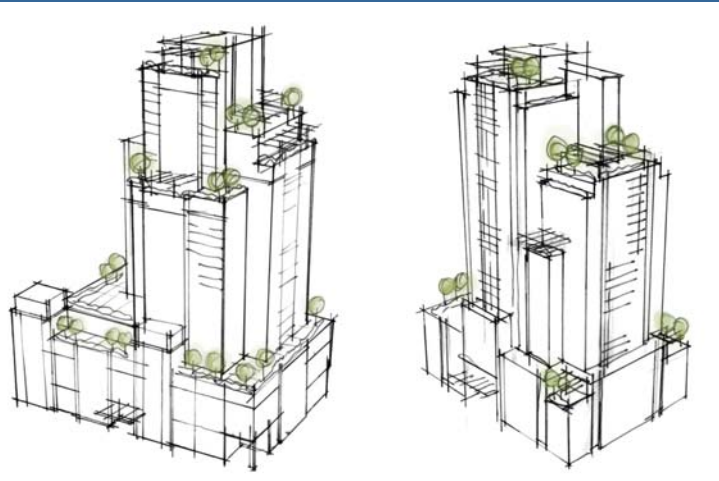


### CD Comparison

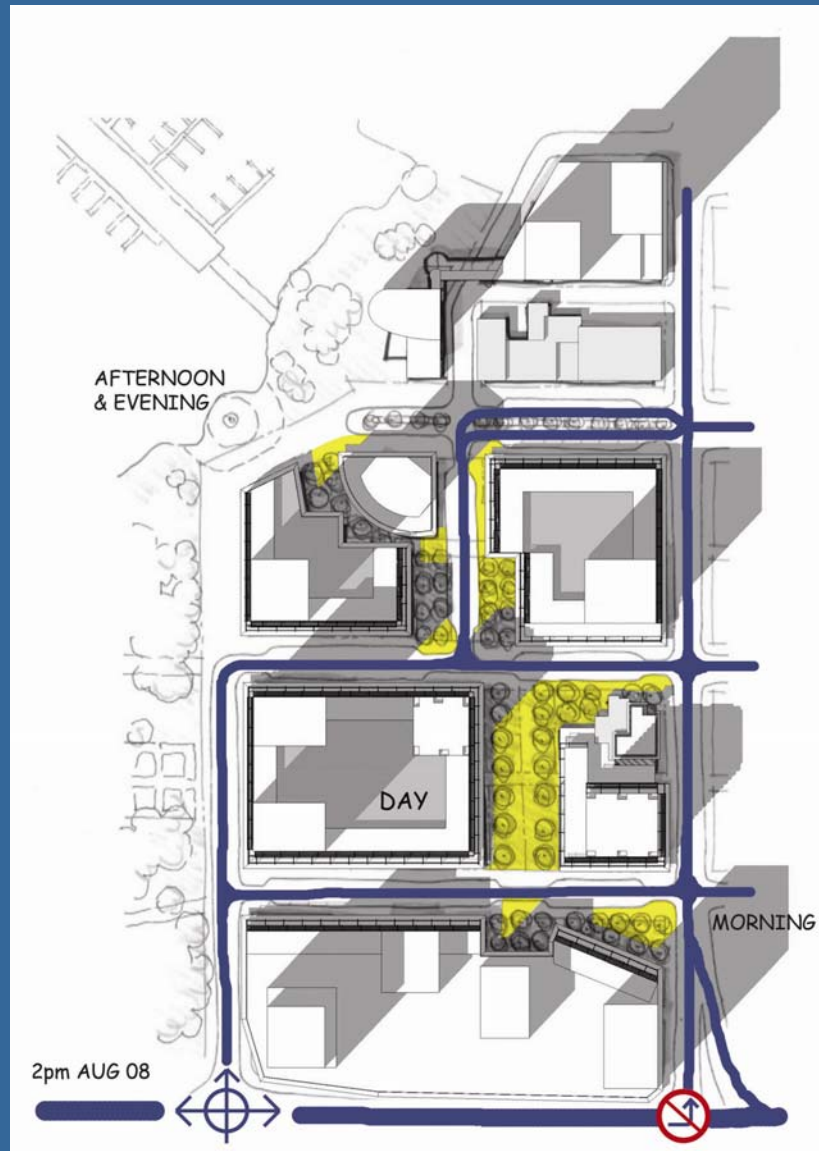




# CD = calibrating detail



# Traffic and Sunshine





# Height, Volume + Sunlight

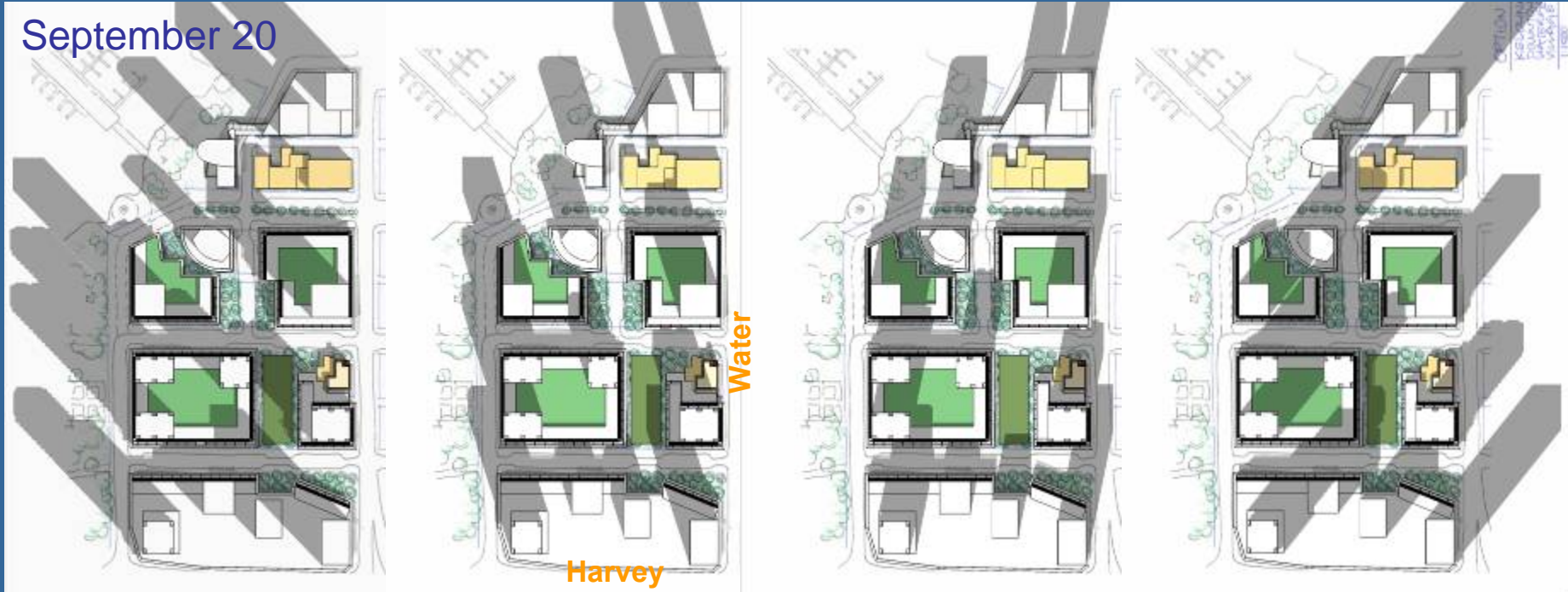
10:30 AM

12:00 PM

1:30 PM

3:00 PM

September 20



morning  
welcome



afternoon  
filter

# Community Amenity Matrix

- Streetscape & public plaza construction
  - Increase of acreage of urban park
  - High quality functional public space
- Indoor public space
  - Daycare
  - Multi-use facility (senior/youth/meeting)
- Public pier with day/commercial moorage
- Children's playground
- Public washroom facility





# Economic Amenities (or how to pay for the public good)

Feedback loop

*City, public, and development community*

+

Identify development **incentive**  
as catalyst for positive change

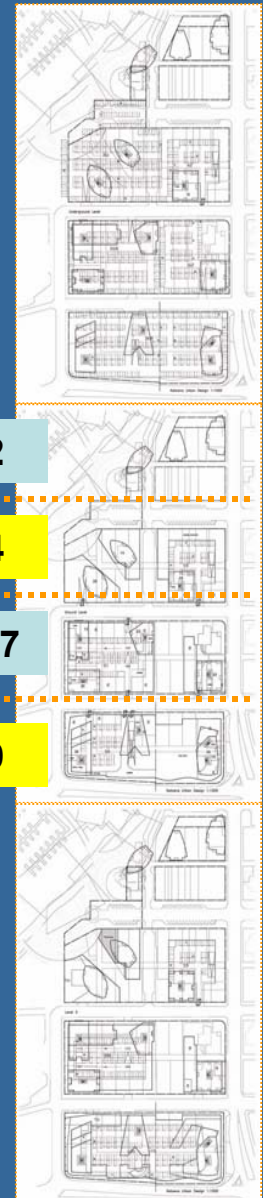
=

Enable economic feasibility &  
return **benefit** to the public

# Proposed Net Floor Area

FAR calculation as per Kelowna Zoning Bylaw standards

Sub Area Floor Area Calculator		CD 21 Base Density	CD 21 Base Density + Amenity Density
11-Sep-08 OPTION 18A		Floor Area, Net sq ft	Floor Area, Net sq ft
<b>SUB AREA 1</b>	Total Net Floor Area	<b>166,339</b>	<b>332,677</b>
<b>SUB AREA 2</b>	Total Net Floor Area	<b>39,697</b>	<b>79,394</b>
<b>SUB AREA 3</b>	Total Net Floor Area	<b>163,197</b>	<b>326,394</b>
<b>SUB AREA 4</b>	Total Net Floor Area	<b>108,871</b>	<b>217,741</b>
<b>SUB AREA 5</b>	Total Net Floor Area	<b>132,850</b>	<b>265,699</b>
<b>SUB AREA 6</b>	Total Net Floor Area	<b>99,056</b>	<b>198,112</b>
<b>SUB AREA 7</b>	Total Net Floor Area	<b>89,321</b>	<b>178,641</b>
<b>SUB AREA 8</b>	Total Net Floor Area	<b>181,962</b>	<b>363,925</b>
<b>SUB AREA 9</b>	Total Net Floor Area	<b>190,519</b>	<b>381,037</b>
<b>Total Net Floor Area - CD 21</b>		<b>1,132,114</b>	<b>2,343,622</b>



1 & 2

3 & 4

5, 6 & 7

8 & 9

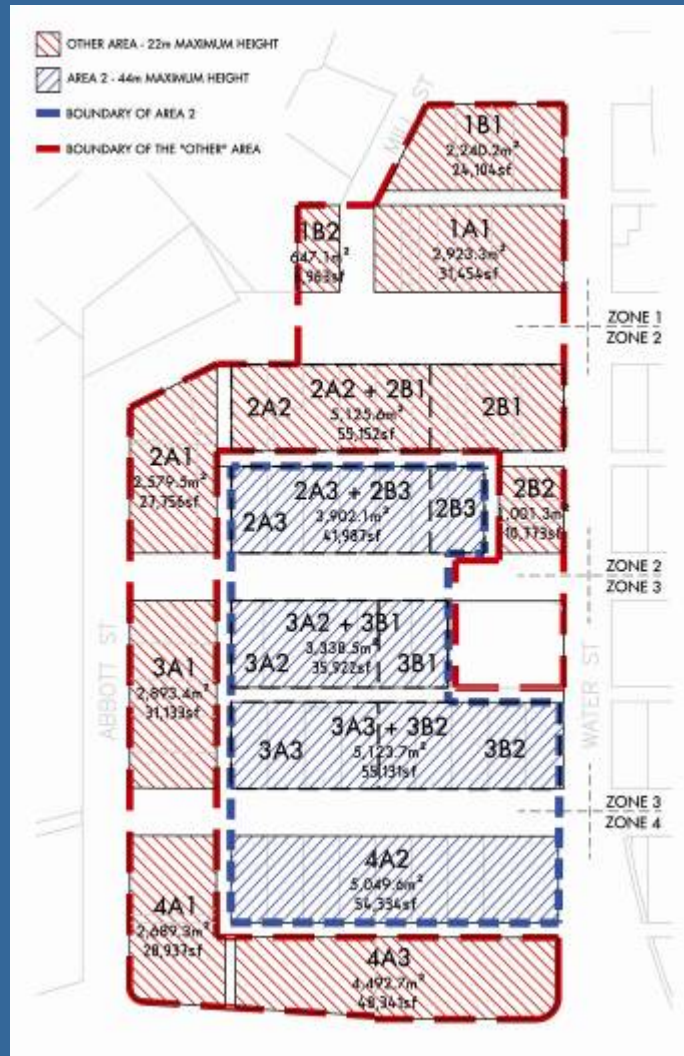
Underground Level

Grade Level

3rd Level



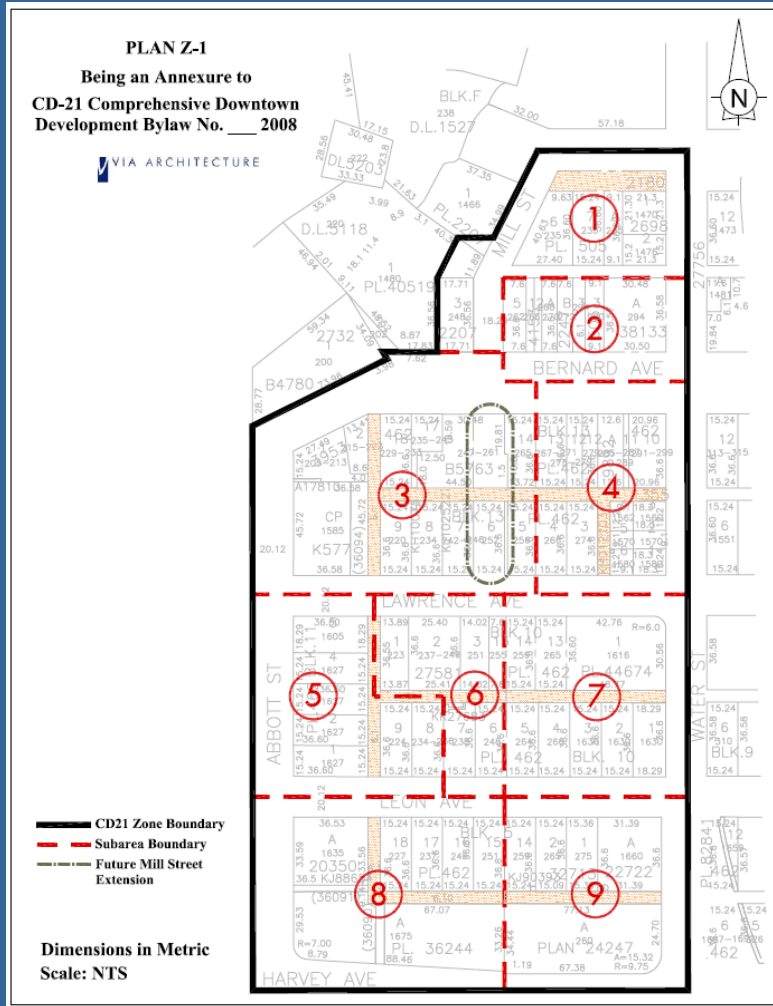
# C7 Existing Zoning (potential build out)



C7 YIELD	Site Area	Area 2 44m max ht	'Other Area' 22m Max ht	Fully assembled		Not assembled	
				GFA	FAR	GFA	FAR
Sub Area 1A	1A1	31,454	-	94,363	3.0	94,363	3.0
Remains as C7		31,454	YES	94,363	3.0	94,363	3.0
Sub Area 1B	1B1	24,104	-	72,313	3.0	72,313	3.0
	1B2	6,963	-	13,925	2.0	13,925	2.0
Total		31,067	YES	86,238	2.8	86,238	2.8
Sub Areas 2A + 2B	2A1	27,756	-	83,267	3.0	77,263	2.8
	2A2 + 2B1	55,152	-	165,456	3.0	153,448	2.8
	2A3 + 2B3	41,987	YES	209,935	5.0	173,911	4.1
	2B2	10,773	-	21,547	2.0	15,543	1.4
Total		135,668	YES	480,205	3.5	420,165	3.1
Sub Areas 3A + 3B	3A2 + 3B1	35,919	-	179,595	5.0	143,571	4.0
	3B3	-	YES	-	-	-	-
	3A3 + 3B2	55,134	YES	275,670	5.0	239,646	4.3
	3A1	31,133	-	93,399	3.0	87,395	2.8
Total		122,186	YES	548,664	4.5	470,612	3.9
Sub Area 4	4A1	28,937	-	86,810	3.0	80,806	2.8
	4A2	54,334	YES	271,669	5.0	253,657	4.7
	4A3	48,341	-	145,023	3.0	139,019	2.9
Total		131,611	YES	503,502	3.8	473,482	3.6
Total		420,532		1,618,609	3.8	1,450,497	3.4



# Proposed CD Development Yield



DEVELOPMENT PLANNING SUMMARY		C7 YIELD				CD YIELD				VIA ARCHITECTURE			
05-Feb-08	Site Area sf	C7 Site Area	Area 2 44m ht	other 22m ht	Fully Assembled GFA	FAR	Not Assembled GFA	FAR	CD Site Area	Fully Assembled GFA	FAR	Not Assembled GFA	FAR
<b>Sub Area 1A</b>	31,454		-	YES	94,363	3.0	94,363	3.0					
Remains as C7	31,454				94,363	3.0	94,363	3.0		94,363	3.0		
<b>Sub Area 1B</b>													
1B1	24,104	24,104	-	YES	72,313	3.0	72,313	3.0	24,104	397,277	7.2	72,313	3.0
(City) 1B2	6,963	6,963	-	YES	13,925	2.0	13,925	2.0	6,963	76,503	4.6	13,925	2.0
<b>Sub Total Sub Area 1B</b>	<b>31,067</b>	<b>31,067</b>			<b>86,238</b>	<b>2.8</b>	<b>86,238</b>	<b>2.8</b>	<b>71,321</b>	<b>473,781</b>	<b>6.6</b>	<b>86,238</b>	<b>2.8</b>
r.o.w transfer 2A4	6,335								6,335	0.0	0.0	30,090	4.7
r.o.w transfer 2A7	6,004								6,004	0.0	0.0	28,518	4.7
r.o.w transfer 2A3	8,338								8,338	0.0	0.0	39,604	4.7
r.o.w transfer 3B1	6,004								6,004	0.0	0.0	34,665	5.8
r.o.w transfer 3B3	6,004								6,004	0.0	0.0	34,665	5.8
r.o.w transfer 1C1	7,569								7,569	0.0	0.0	220,002	29.1
<b>Sub Total Transfer</b>	<b>40,254</b>									transferred to above		387,543	9.6
<b>Total</b>	<b>71,321</b>								<b>71,321</b>	<b>473,781</b>	<b>6.6</b>	<b>473,781</b>	<b>6.6</b>
<b>Sub Area 2A</b>													
2A1	27,756	27,756	-	YES	83,267	3.0	77,263	2.8	27,756	111,352	4.0	83,267	3.0
2A2	9,558	32,977	-	YES	98,931	3.0	92,927	2.8	9,558	38,345	4.0	28,674	3.0
2A5	8,746	inc in 2A2	-	-					8,746	35,088	4.0	26,238	3.0
2A6	18,012	32,957	YES	-	164,785	5.0	146,773	4.5	18,012	108,266	6.0	90,060	5.0
2A8	8,941	inc in 2A6	YES	-					8,941	53,742	6.0	44,705	5.0
<b>Sub Total Sub Area 2A</b>	<b>73,013</b>	<b>93,690</b>			<b>346,983</b>	<b>3.7</b>	<b>316,963</b>	<b>3.4</b>	<b>73,013</b>	<b>346,794</b>	<b>4.7</b>	<b>272,944</b>	<b>3.7</b>
r.o.w transfer 2A3	8,338	inc in 2A2	-	-						sale & transfer to 1B	-	r.o.w.	
r.o.w transfer 2A4	6,335	inc in 2A2	-	-						sale & transfer to 1B	-	r.o.w.	
r.o.w transfer 2A7	6,004	inc in 2A6	YES	-						sale & transfer to 1B	-	r.o.w.	
r.o.w transfer 2C1	11,060								11,060	0.0	0.0		
<b>Sub Total Transfer 2A</b>	<b>31,737</b>									transferred to above			
<b>Total</b>	<b>104,750</b>												
<b>Sub Area 2B</b>													
2B1	22,175	22,175	-	YES	66,525	3.0	60,521	2.7	22,175	121,903	5.5	66,525	3.0
2B2	10,773	10,773	-	YES	21,547	2.0	15,543	1.4	10,773	40,020	3.7	21,547	2.0
2B3	9,030	9,030	YES	-	45,150	5.0	27,138	3.0	9,030	75,557	8.4	45,150	5.0
<b>Sub Total Sub Area 2B</b>	<b>41,978</b>	<b>41,978</b>			<b>133,222</b>	<b>2.2</b>	<b>103,202</b>	<b>2.5</b>	<b>41,978</b>	<b>237,480</b>	<b>5.7</b>	<b>133,222</b>	<b>3.2</b>
r.o.w transfer 2C2	6,313		-	-					6,313	0.0	0.0		
<b>Sub Total Transfer 2B</b>	<b>6,313</b>									transferred to above			
<b>Total</b>	<b>48,291</b>												
<b>Sub Area 3A</b>													
3A1	31,133	31,133	-	YES	93,399	3.0	87,395	2.8	31,133	153,506	4.9	93,399	3.0
3A2	24,078	24,078	YES	-	120,390	5.0	102,378	4.3	24,078	197,868	8.2	120,390	5.0
3A3	24,435	24,435	YES	-	122,175	5.0	104,163	4.3	24,435	200,802	8.2	122,175	5.0
<b>Total Sub Area 3A</b>	<b>79,646</b>	<b>79,646</b>			<b>335,964</b>	<b>4.2</b>	<b>293,936</b>	<b>3.7</b>	<b>79,646</b>	<b>552,176</b>	<b>6.9</b>	<b>335,964</b>	<b>4.2</b>
r.o.w transfer 3C1	9,183		-	-					9,183	0.0	0.0		
<b>Sub Total Transfer 3A</b>	<b>9,183</b>									transferred to above			
<b>Total</b>	<b>88,828</b>												
<b>Sub Area 3B</b>													
3B1	6,004	11,841	YES	-	59,205	5.0	41,193	3.5		sale & transfer to 1B	-		
3B2	5,837	inc in 3B1	YES	-					5,837	-	0.0	29,185	5.0
3B3	6,004	30,699	YES	-	153,495	5.0	135,483	4.4		sale & transfer to 1B	-		
3B4	24,695	inc in 3B3	YES	-					24,695	176,280	7.1	123,475	5.0
<b>Total Sub Area 3B</b>	<b>42,540</b>	<b>42,540</b>			<b>212,700</b>	<b>5.0</b>	<b>176,676</b>	<b>4.2</b>	<b>30,532</b>	<b>176,280</b>	<b>5.8</b>	<b>152,660</b>	<b>5.0</b>
r.o.w transfer 3C2	5,156		-	-					5,156	0.0	0.0	23,620	
r.o.w transfer 3C3	19,175		-	-					19,175	existing heritage building retained			
<b>Sub Total Transfer 3B</b>	<b>24,331</b>									transferred to above			
<b>Total</b>	<b>66,871</b>												
<b>Sub Area 4A</b>													
4A1	28,937	28,937	-	YES	86,810	3.0	80,806	2.8	28,937	133,394	4.6	86,810	3.0
4A2	54,334	54,334	YES	-	271,669	5.0	253,657	4.7	54,334	417,453	7.7	271,669	5.0
4A3	48,341	48,341	-	YES	145,023	3.0	136,019	2.9	48,341	222,846	4.6	145,023	3.0
<b>Total Sub Area 4A</b>	<b>131,611</b>	<b>131,611</b>			<b>503,502</b>	<b>3.8</b>	<b>473,482</b>	<b>3.6</b>	<b>131,611</b>	<b>773,693</b>	<b>5.9</b>	<b>503,502</b>	<b>3.8</b>
r.o.w transfer 4C1	13,272		-	-					13,272	0.0	0.0		
<b>Sub Total Transfer 4A</b>	<b>13,272</b>									transferred to above			
<b>Total</b>	<b>144,883</b>												
<b>Total</b>	<b>524,945</b>	<b>420,532</b>			<b>1,616,609</b>	<b>3.8</b>	<b>1,450,497</b>	<b>3.4</b>	<b>428,101</b>	<b>2,560,203</b>	<b>6.0</b>	<b>187,2072</b>	<b>4.4</b>





# SPECIFIC INTERESTS



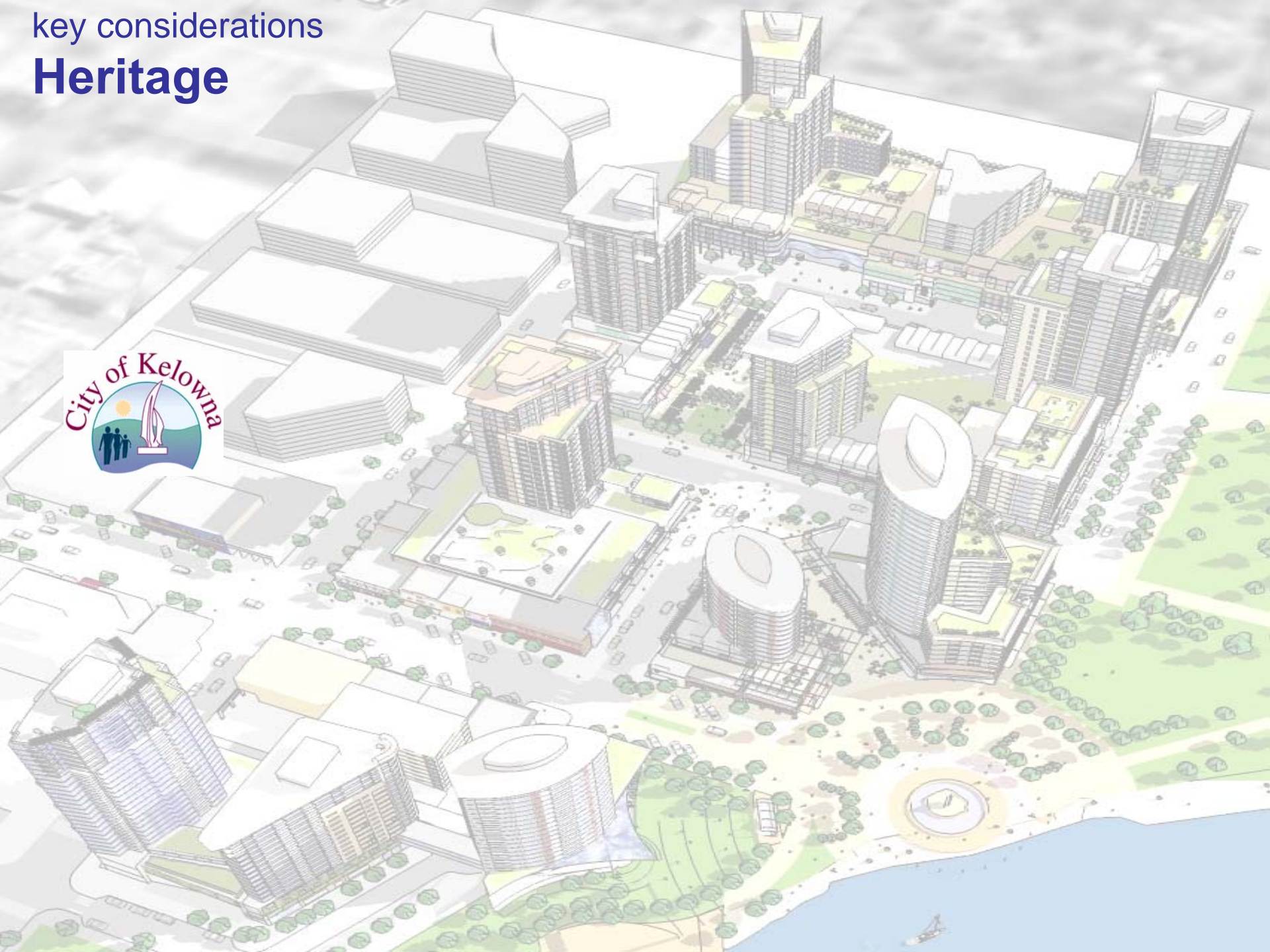
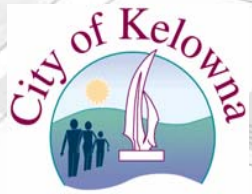
# Fire Protection





# key considerations

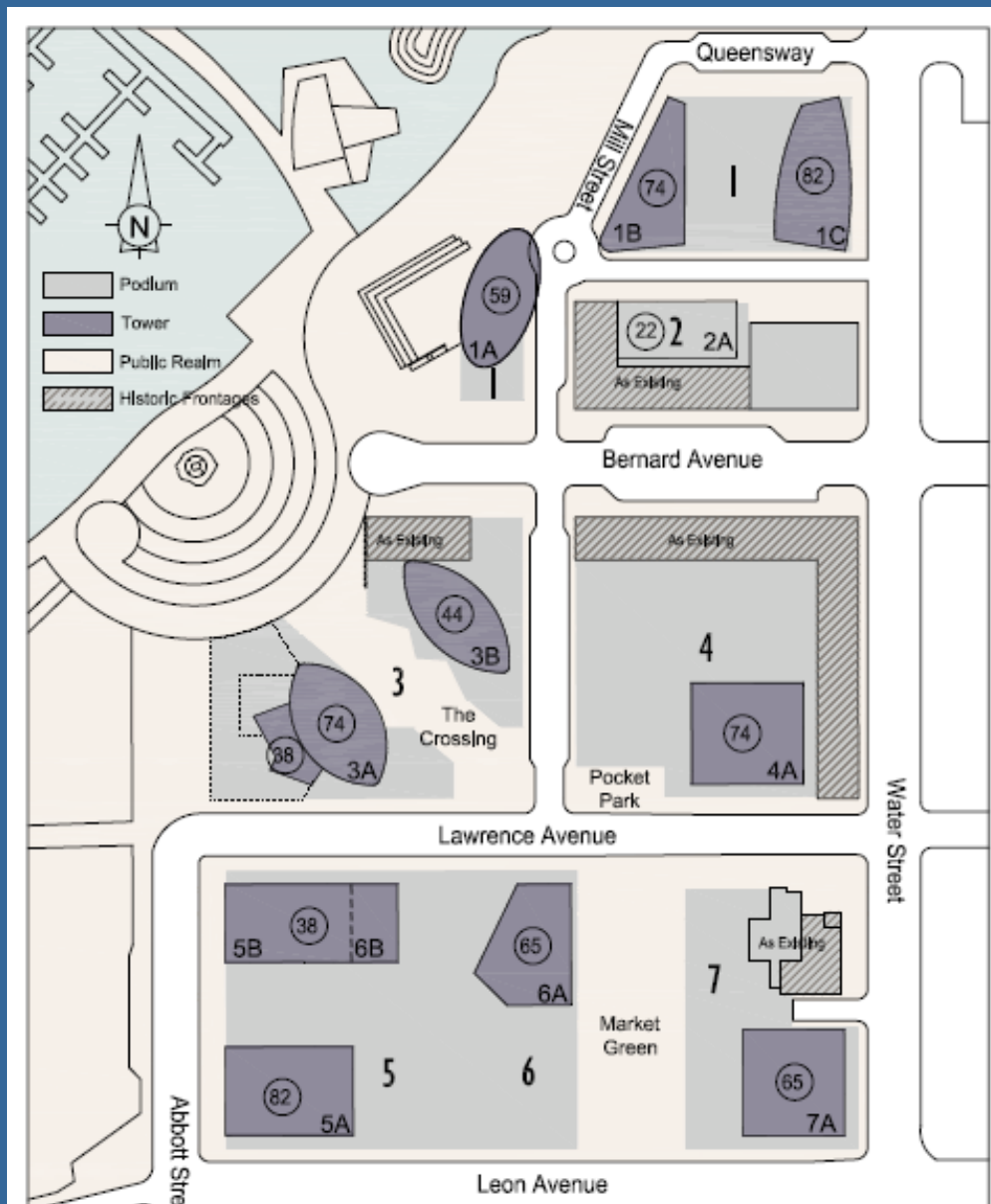
## Heritage



# Heritage Interests







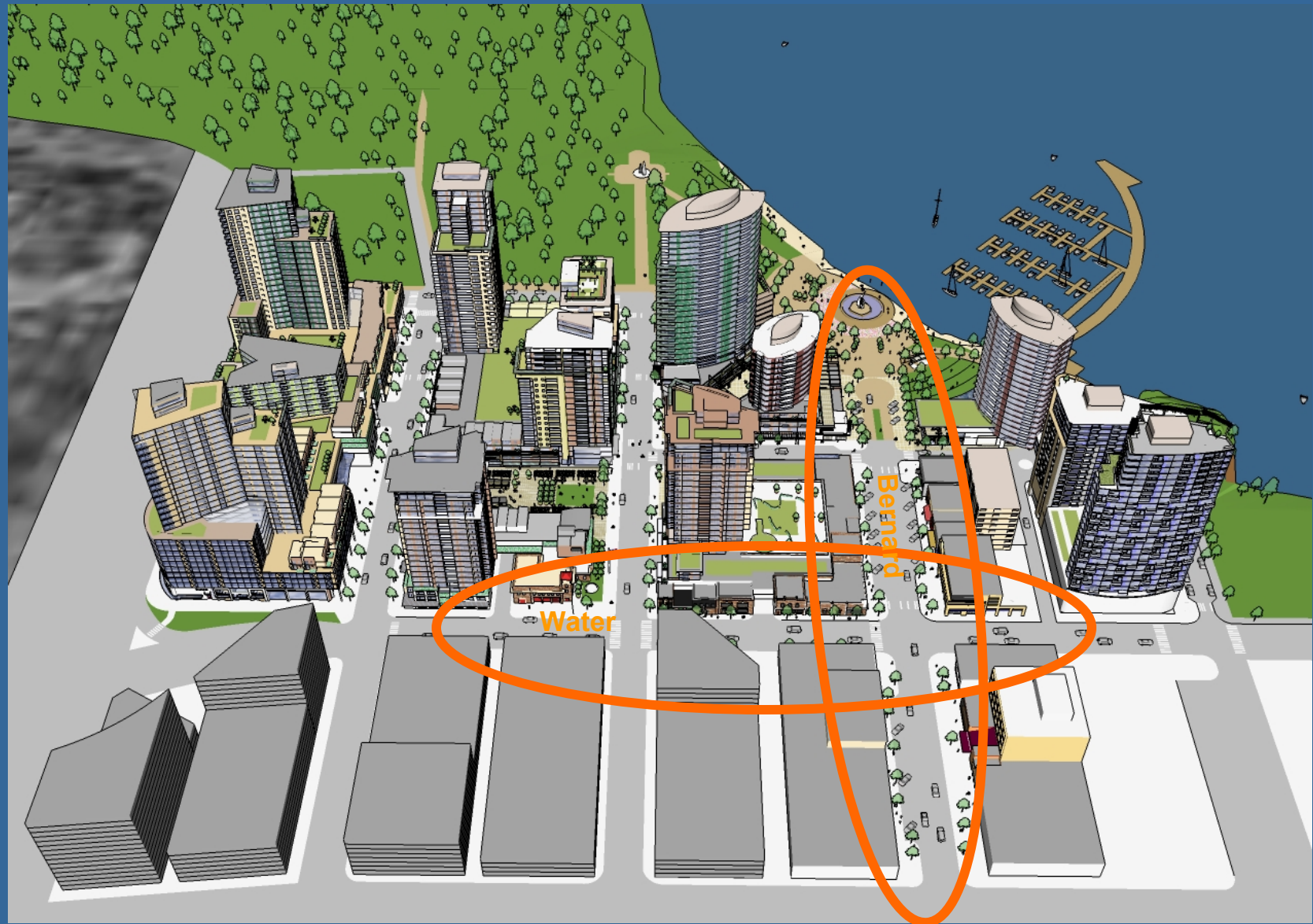
# Heritage Interests

# Heritage Interests





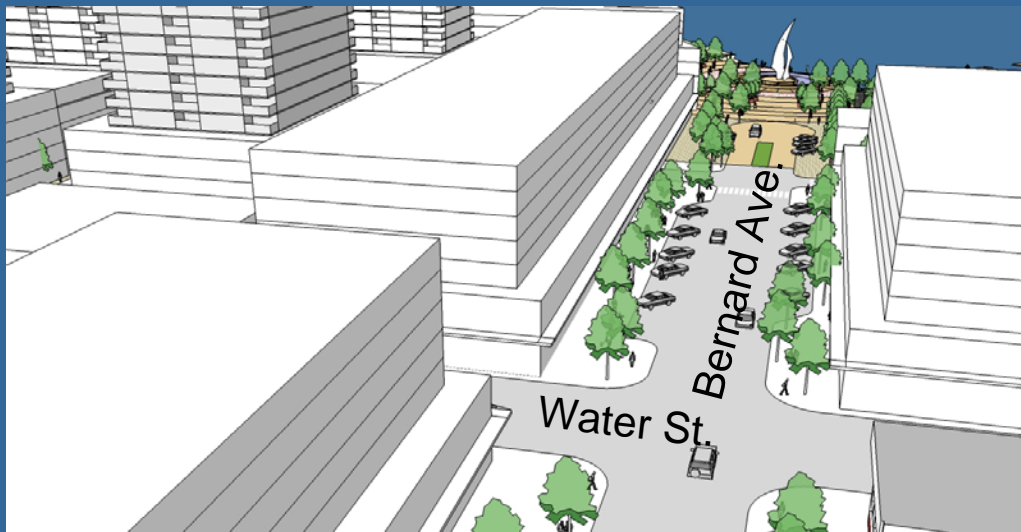
# Grounding the plan - Heritage



# Heritage Context



Proposed CD zoning



Existing C7 zoning



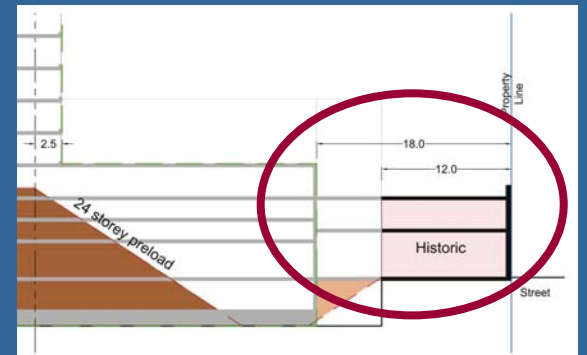
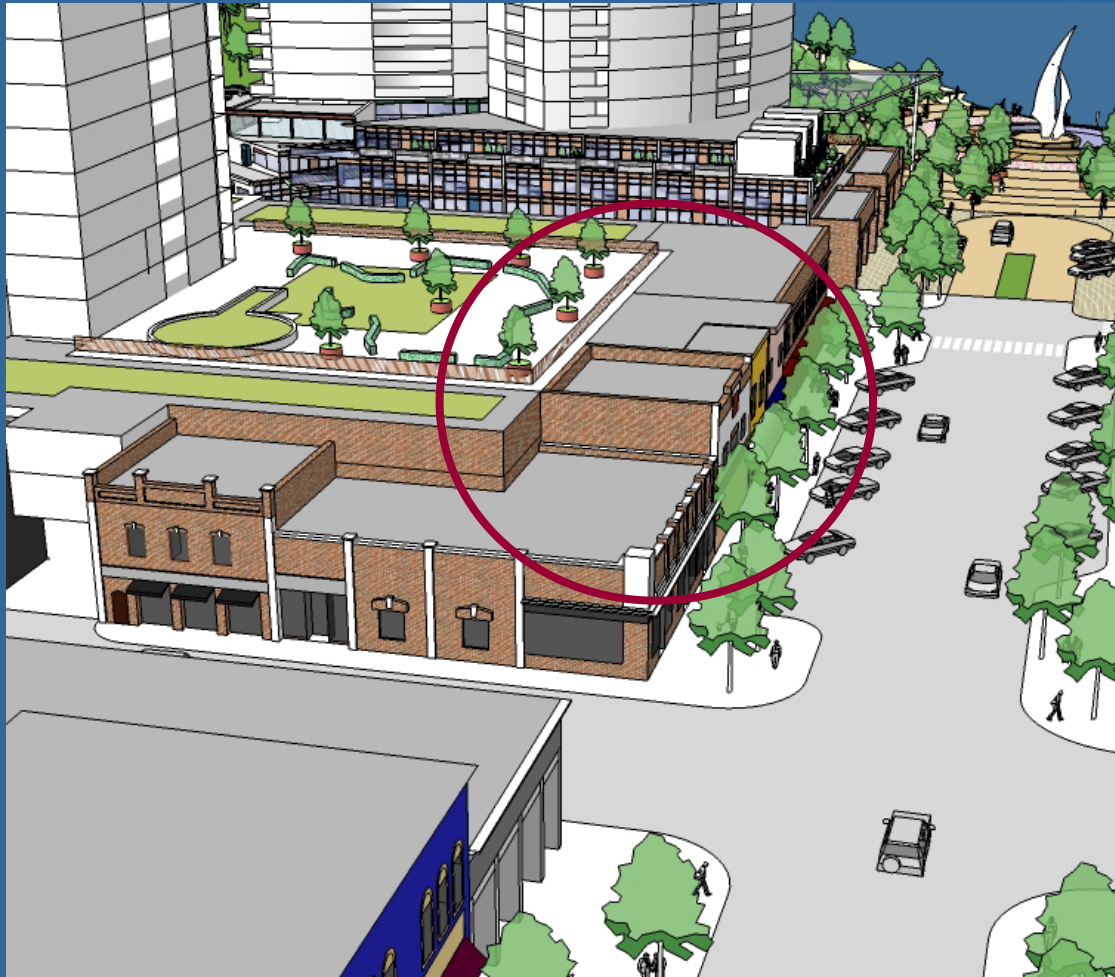
# Legacy Tools



- Preserve historic scale of street enclosure
- Improve C7 sunlight to north side of street
- Pool increased density to south of block
- Waive commercial ground level parking



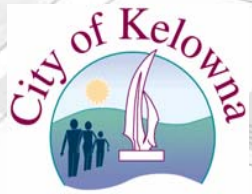
# Heritage Context





key considerations

# Site Preparation



# Site Preparation

- Soil settlement plan
- Property impact/mitigation plan
- Floodplain management plan





# Site Preparation – Land Use Configuration



Underground Level

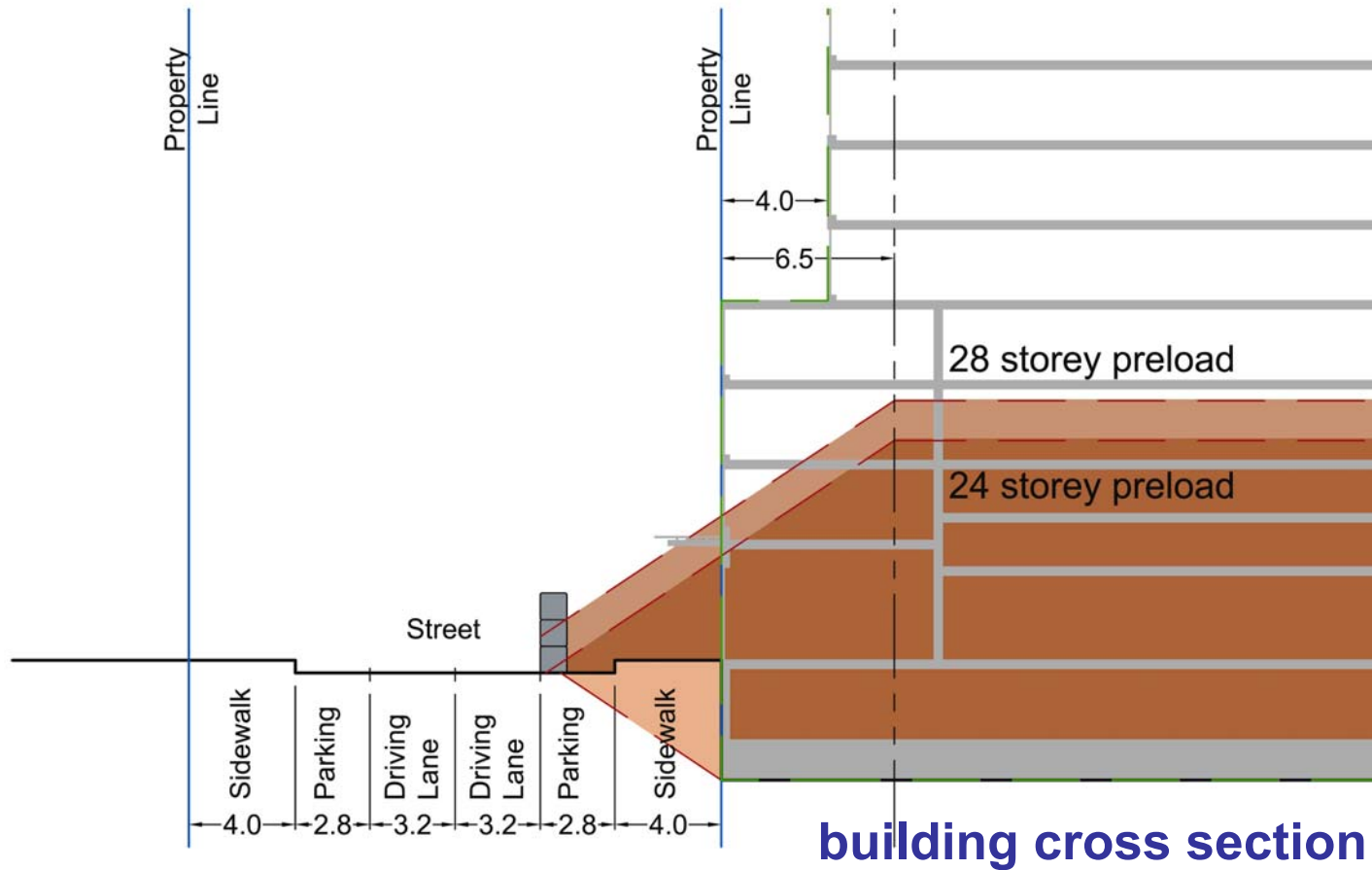


Grade Level



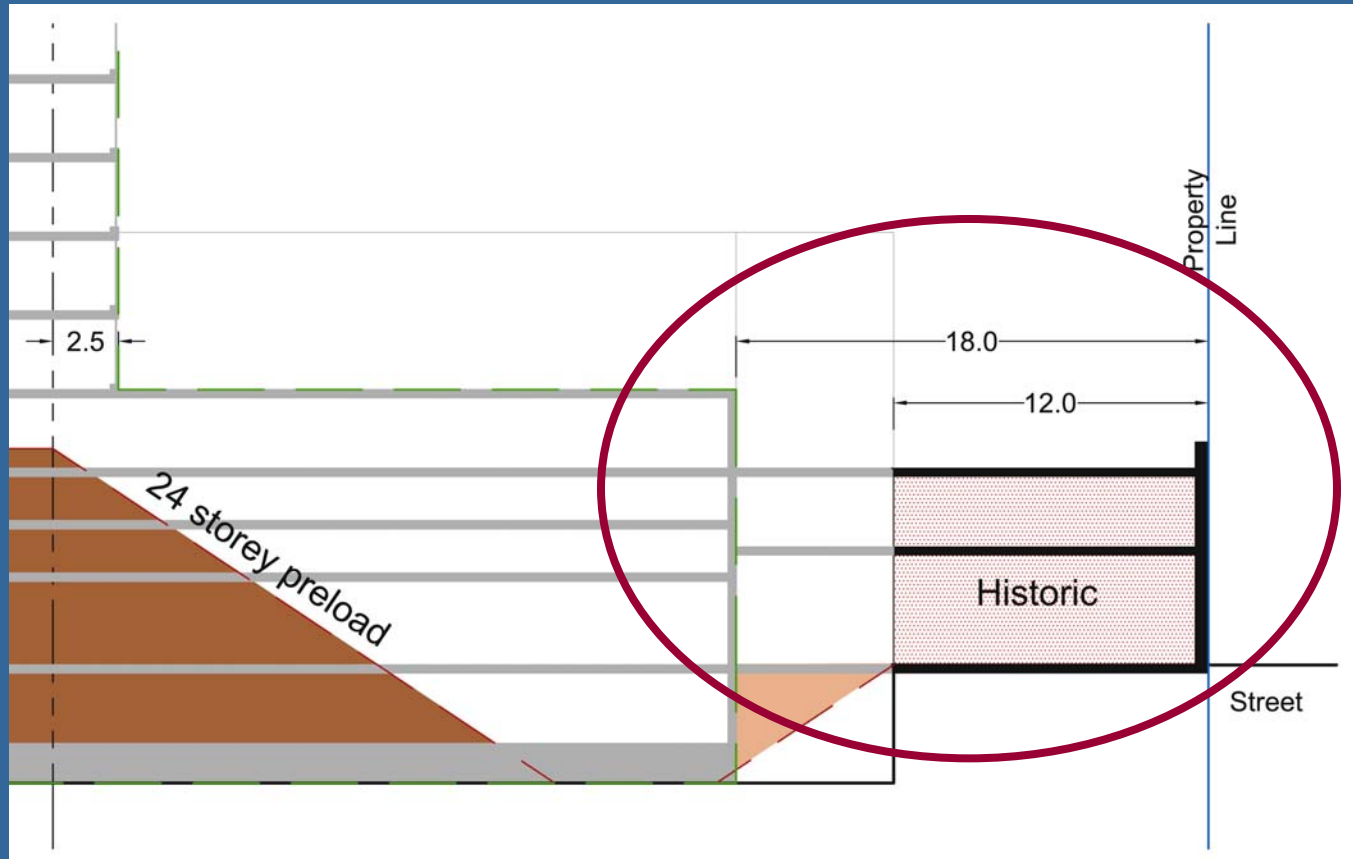
Level 3

# Site Preparation – Geotechnical Configuration



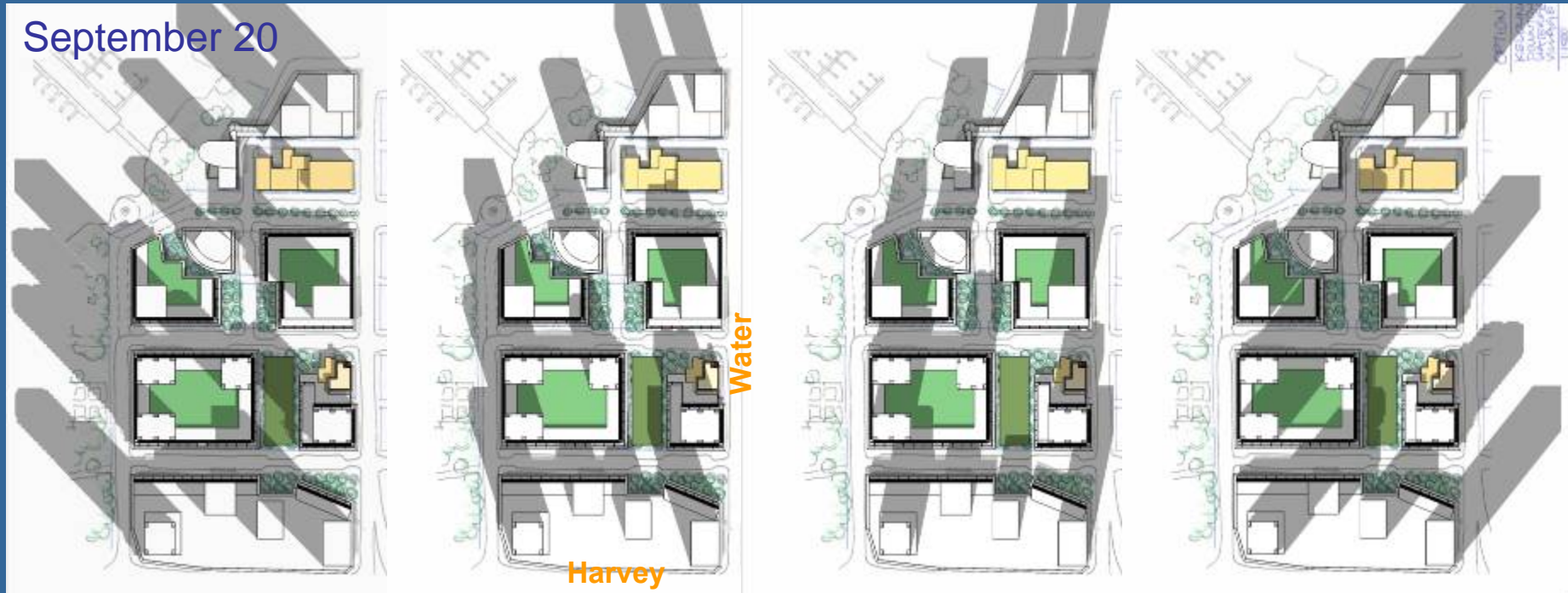


# Site Preparation – Heritage Configuration



# Site Preparation – Solar Access Configuration

September 20



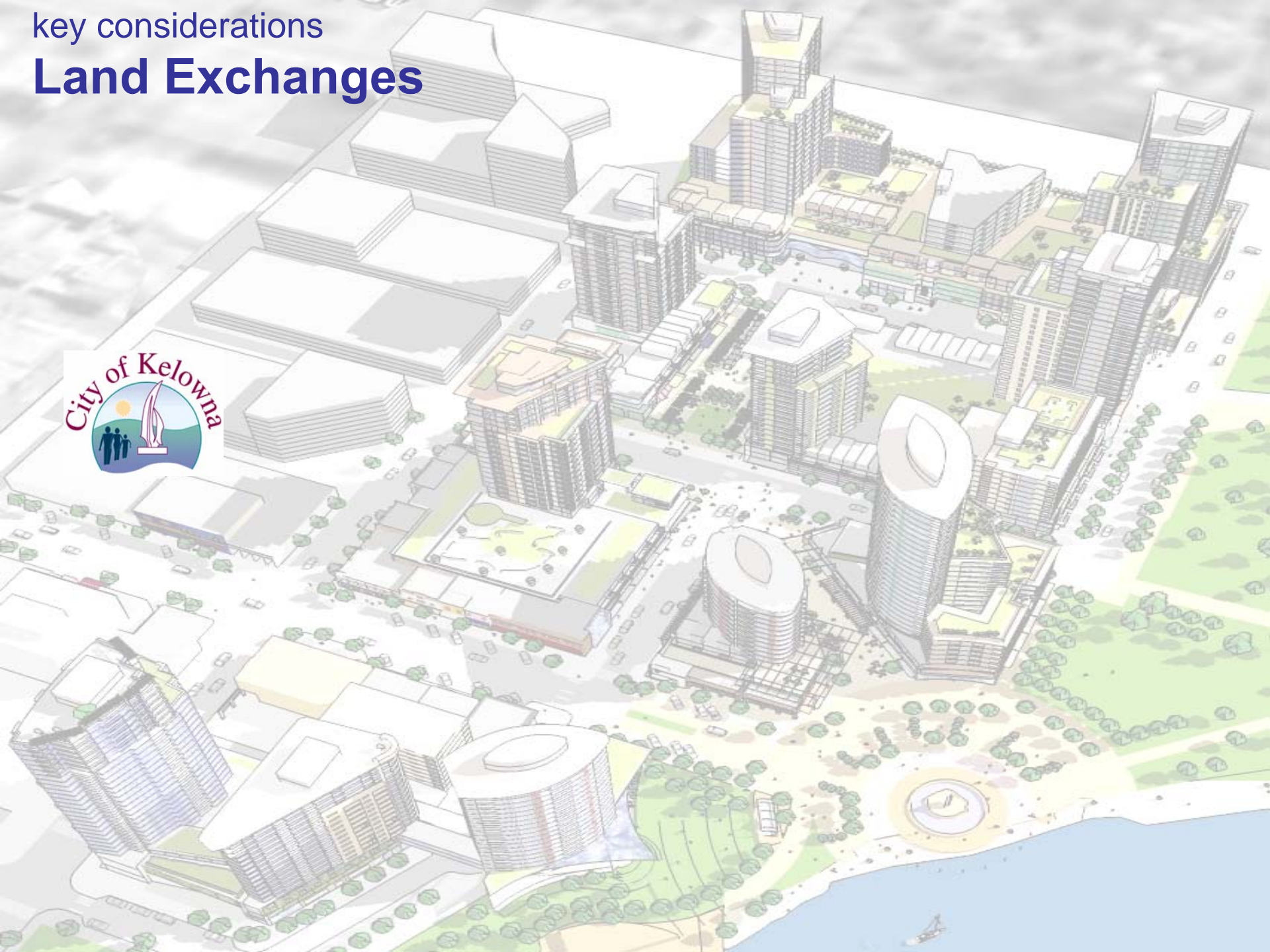
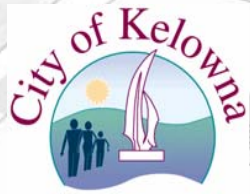


# Residential at Street Level



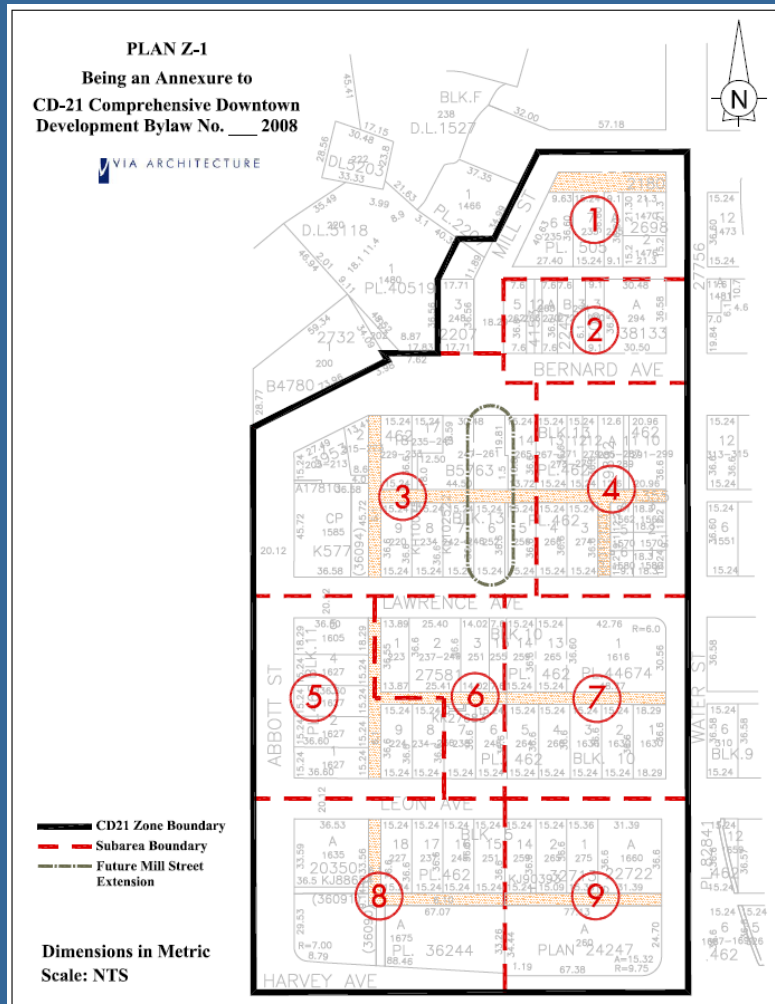
key considerations

# Land Exchanges



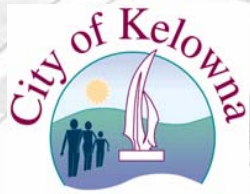


# Land Exchanges



key considerations

# Park Enhancement & Royal Trust Site





# Park Enhancement



Park



Enhancement





# Park Enhancement (Royal Trust Site)





# Park Enhancement - balancing 'centre' and 'edge'



land use synergy  
for community benefit.



- year round jobs
- livability
- comfort & safety
- public amenity



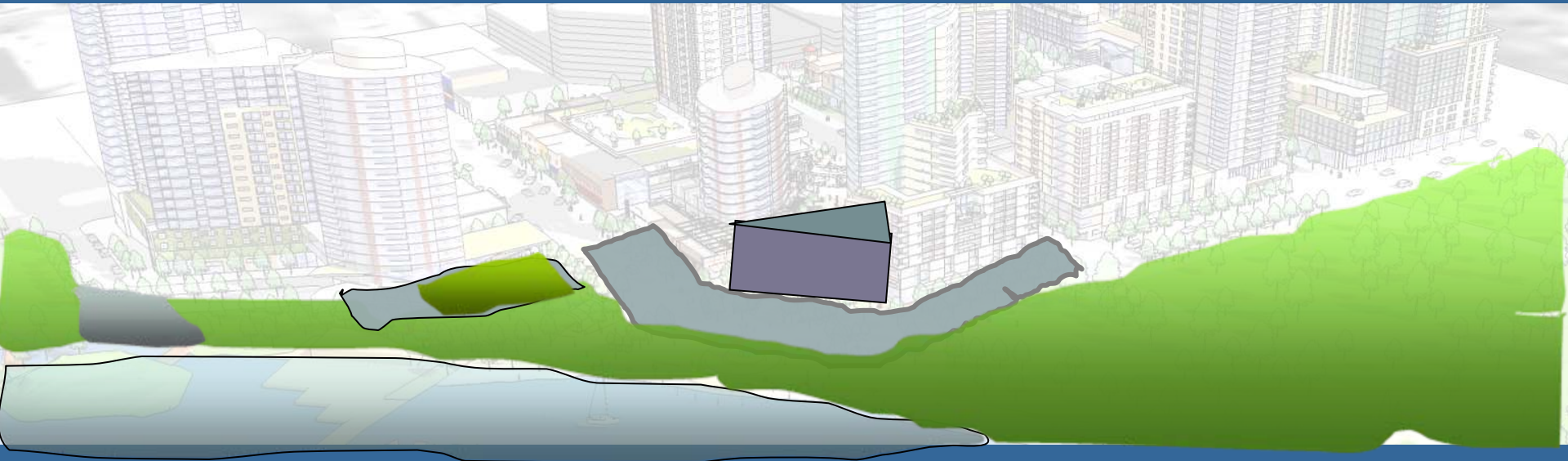


# Park Enhancement - balancing 'centre' and 'edge'



land use synergy  
for community benefit.

- year round jobs
- livability
- comfort & safety
- public amenity



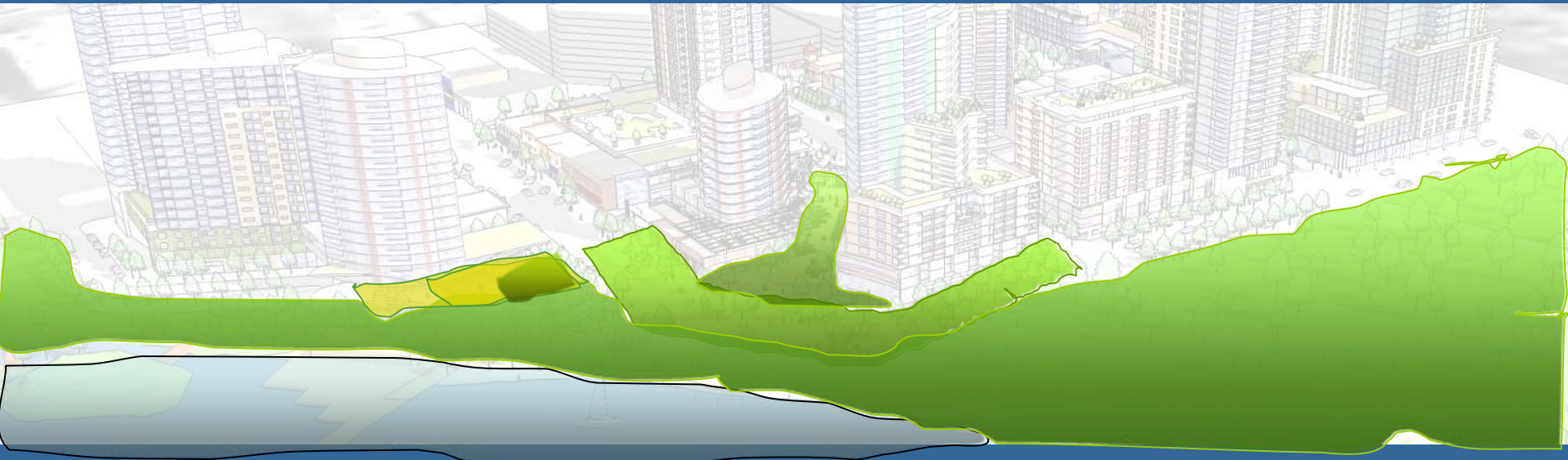


# Park Enhancement - balancing 'centre' and 'edge'



land use synergy  
for community benefit.

- year round jobs
- livability
- comfort & safety
- public amenity





# Park Enhancement - balancing 'centre' and 'edge'





# Park Enhancement - balancing 'centre' and 'edge'





# Park Enhancement - balancing 'centre' and 'edge'



**Opportunity for public benefit**  
*without* **Commitment**  
**or Obligation**





# Park Enhancement - balancing 'centre' and 'edge'





# Park Enhancement



Kerry Park & Royal Trust site (existing)



Kerry Park & Royal Trust site (proposed)



Downtown CD-21 Zone

# Park Enhancement

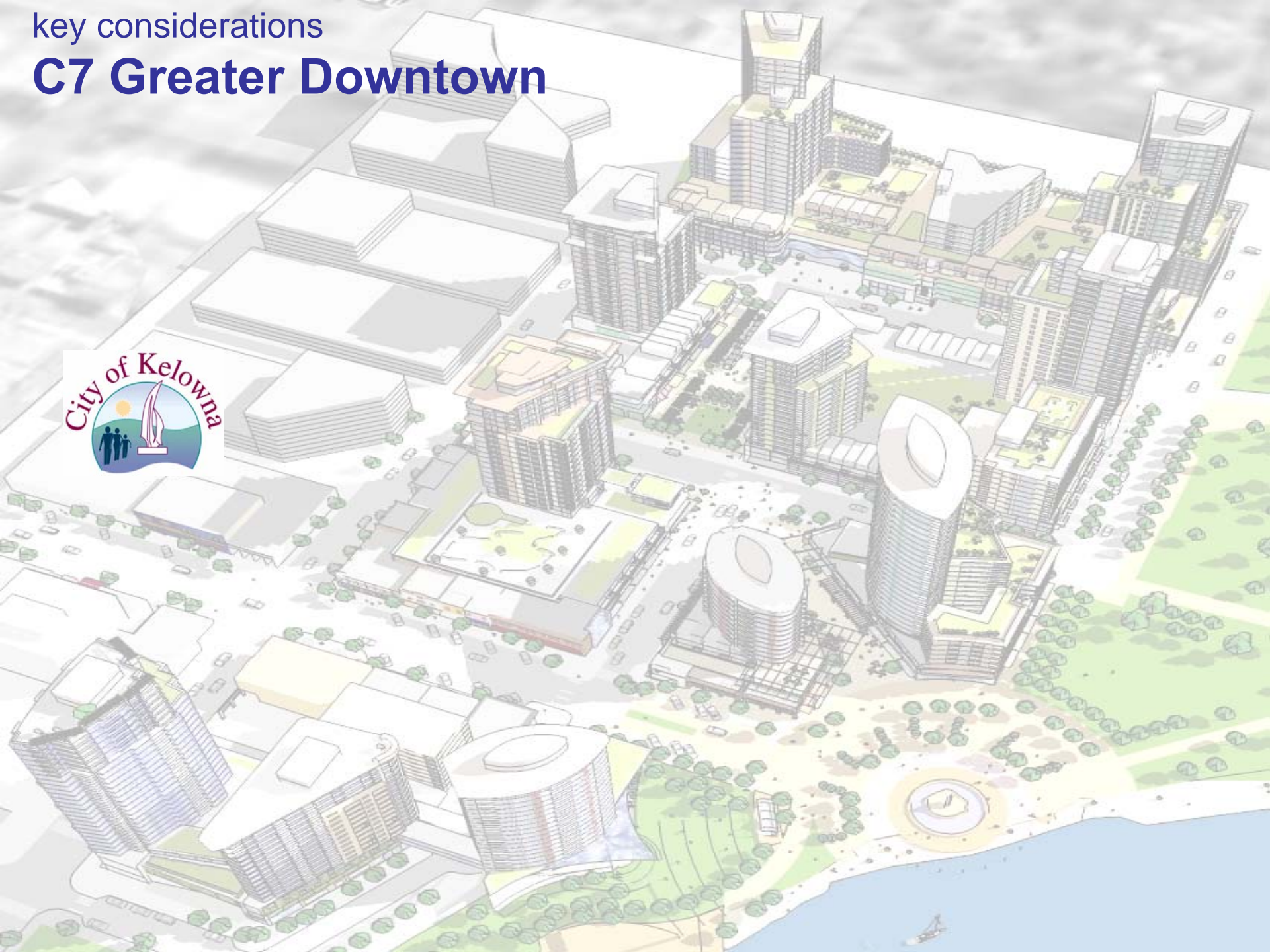


Kerry Park & Sails Plaza



key considerations

## C7 Greater Downtown





# The Greater Downtown



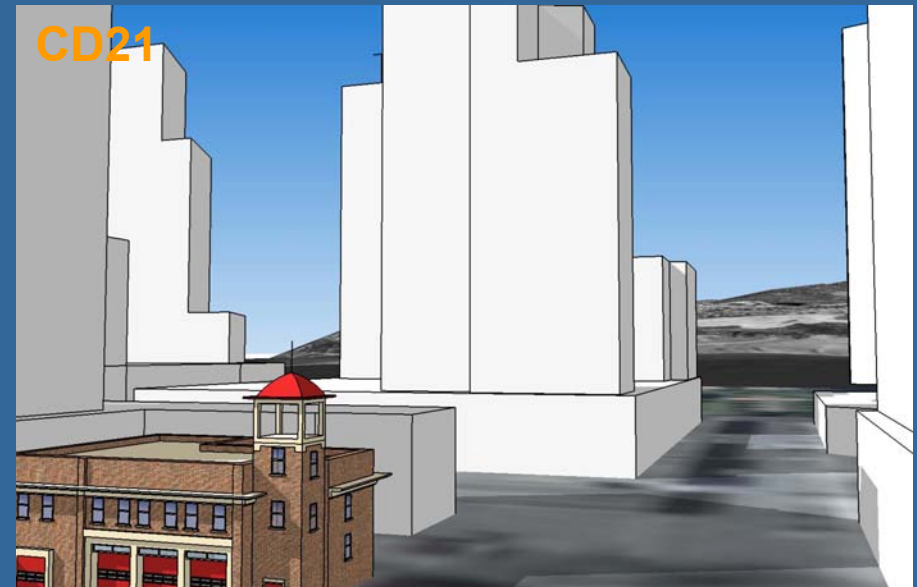
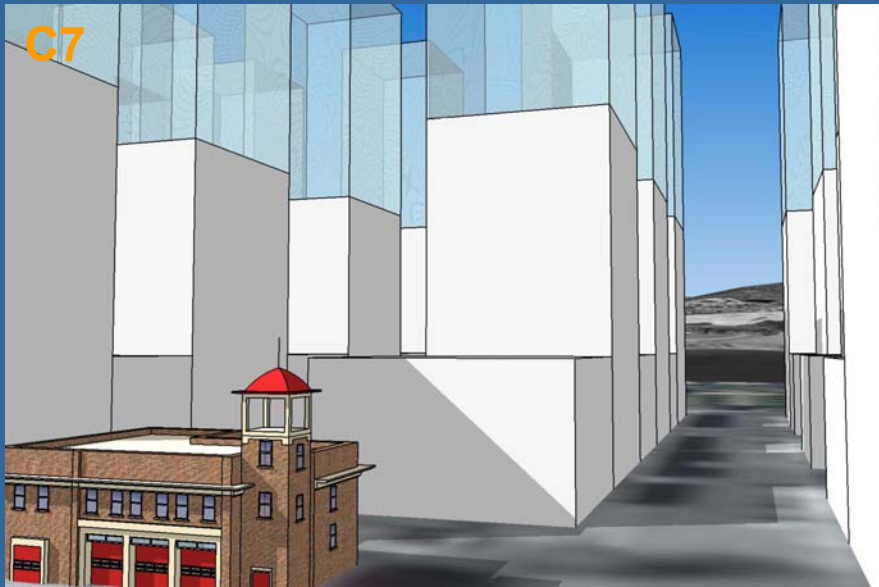


# The Greater Downtown

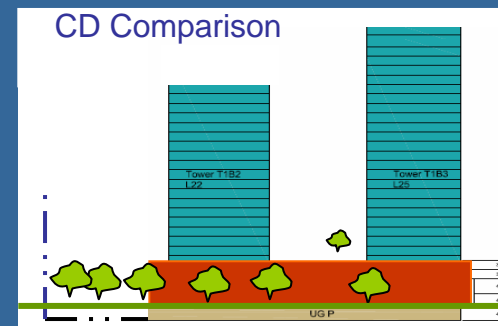
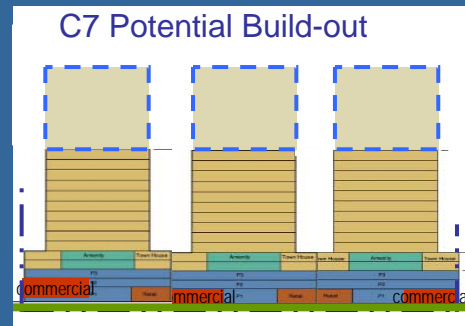
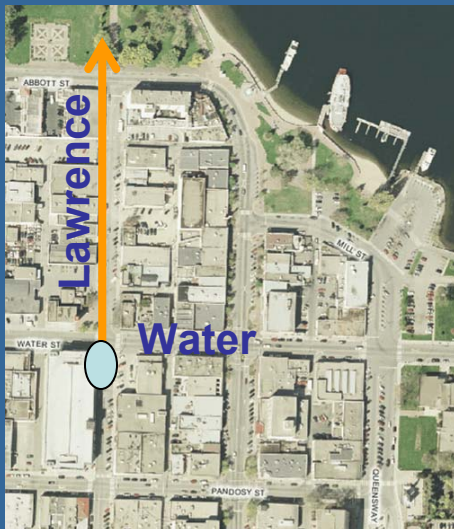


# Building Form:

## Understanding Height & Volume



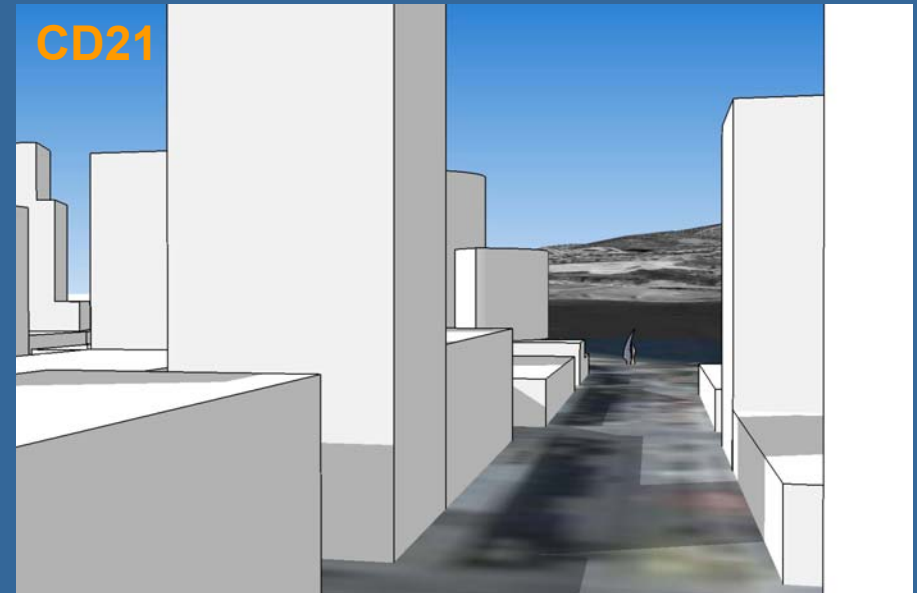
## Test: Lawrence from east of Water



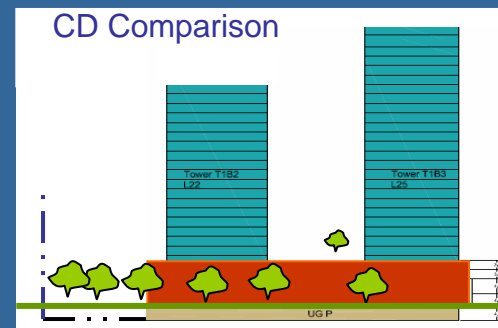
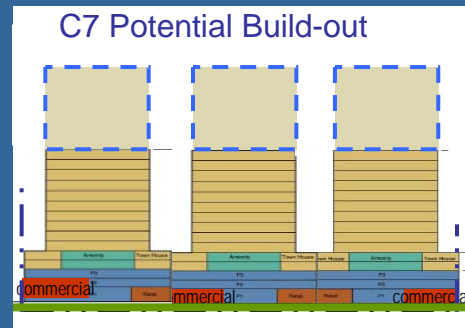
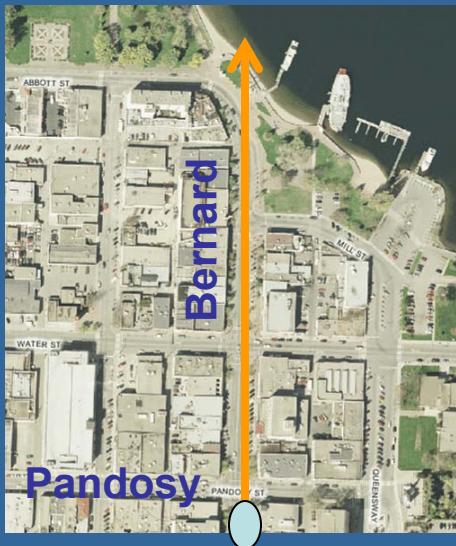


# Building Form:

## Understanding Height & Volume

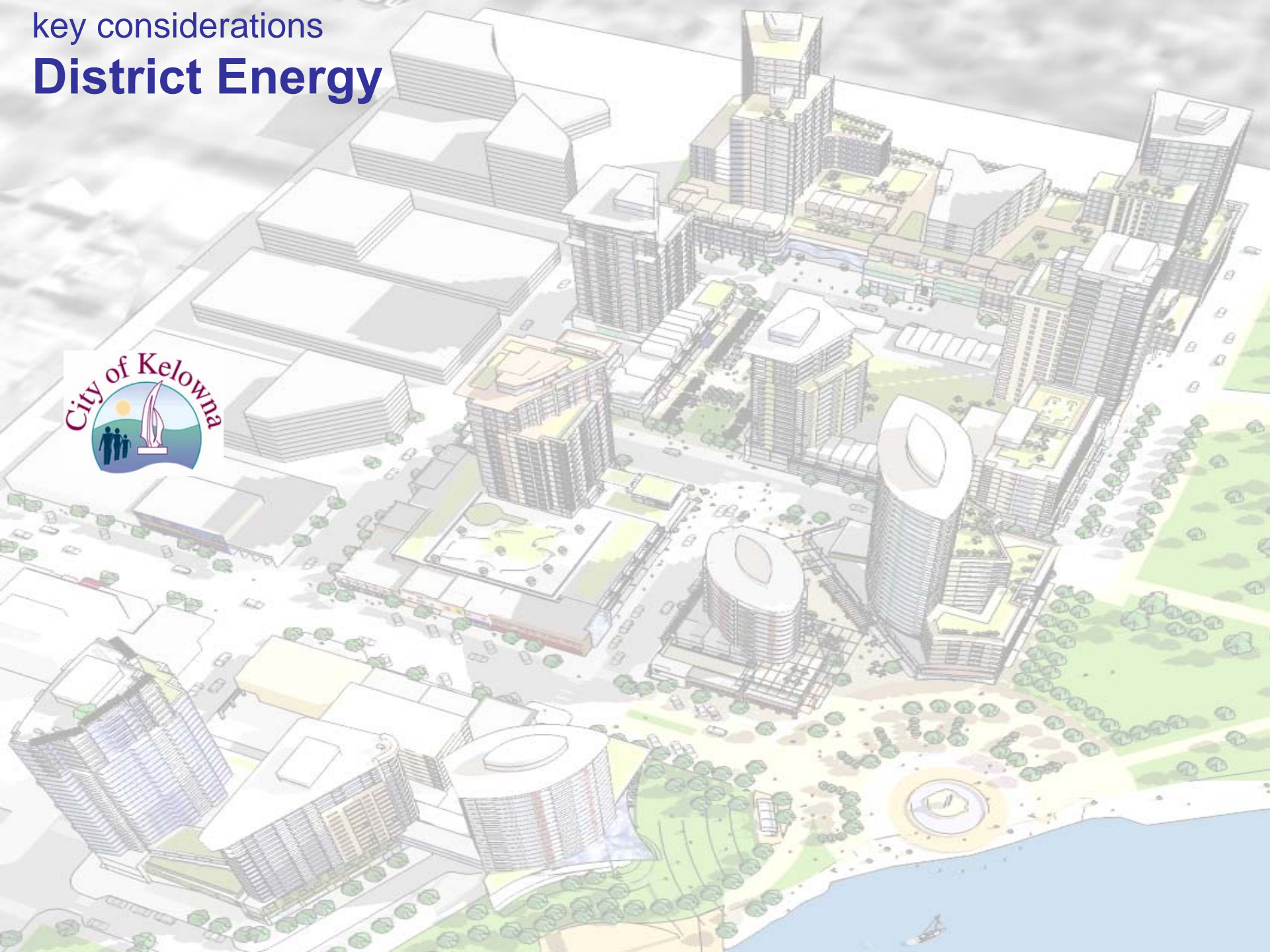
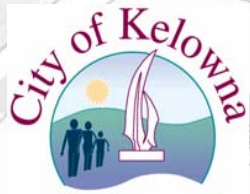


### Test: Bernard from east of Pandosy



key considerations

# District Energy





# District Energy

## PERCEPTION

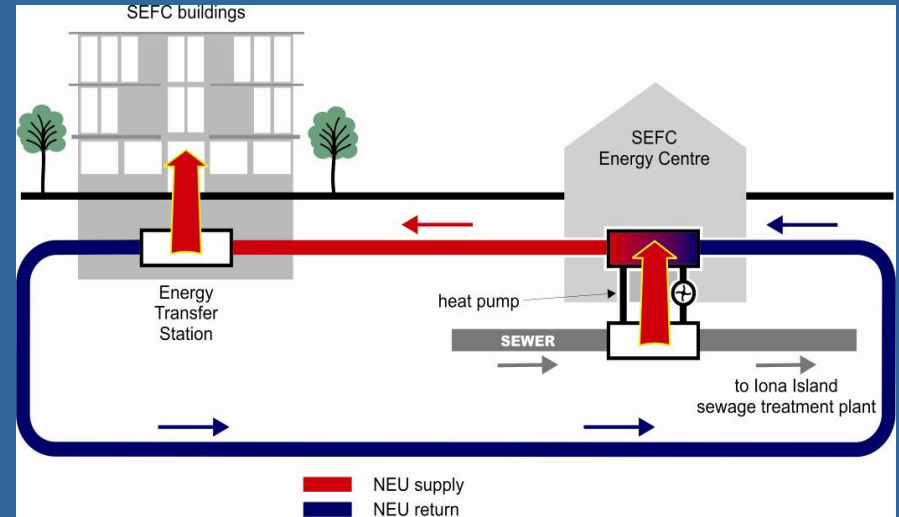
1. Automated
2. Out of sight
3. Minimal land required
4. Simple operation
5. Cost neutral



## REALITY

1. City infrastructure
2. Conflicting land use
3. Central site
4. Complex
5. High capital costs

# South East False Creek – District Energy



- The NEU is a community energy system to supply space heating and domestic hot water to all buildings within SEFC.
- Three components:
  - Energy Centre
  - Distribution Pipe
  - ETS

## CHALLENGES

- Timeline
- Start-up Capital
- Working with developers unfamiliar with district energy
- Gaining public acceptance for Community Energy Centre development



# North Vancouver - District Energy

## North Vancouver LEC Lessons learned

### Hybrid utility service models a viable option for delivery of distributed energy

Open/expandable model allows for innovation, mitigates development and operational risk, and optimizes expertise, ingenuity, and rigour in the delivery of community service.

### Municipalities can encourage uptake of district energy through planning practices.

Process identified sites with high demand for heating/cooling and need for contractual obligations with builders purchasing City-owned land to connect to district energy. Rezoning for development on City-owned lands requires connection to the LEC as other municipal infrastructure, such as sidewalks, roads, sewer and stormwater management.

### High-performing district energy demands a new approach to building design.

Accurately model efficiency of a district with detailed guidelines for developers' design teams to implement infrastructure, design & controls for connection to district energy system.



## How the Lonsdale system works:



### Basic Information

**Building type served:** residential and commercial

**Building area served:** 600,000 ft<sup>2</sup>

**Location:** City of North Vancouver, British Columbia

**Service begins:** 2004

**Utility Company:** Lonsdale Energy Corporation

**Technology:** Seven Viessmann condensing high efficiency boilers

**Production capacity:** 6 MW

**Fuel type:** Natural gas

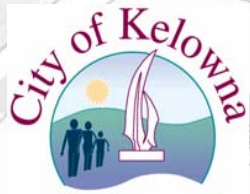
**Distribution system:** Hot water uses thin-walled steel pipe insulated with PUR insulation



VIA ARCHITECTURE

key considerations

# Sustainability



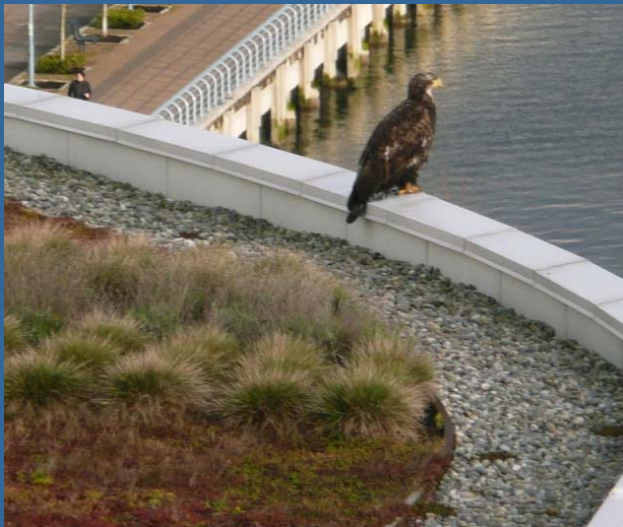


# Sustainability – The Overarching Principle



## Sustainability Menu

- LEED ND for Neighbourhoods
- Pedestrian focus  
walking/biking/connections
- Transit relationship (BRT)
- Parking  
convertible/reduction/creativity
- Active rooftops



# Sustainability – The Measurable

## LEED for Neighbourhood Development

Project Number: 55907 - Project Name: Kelowna CD-1 Urban Plan Date: March 24, 2008

Prerequisite or Credit	OPTION PATH	Potential Points	Achievable? Likely Points	Comments to Achieve Level
<b>Smart Location &amp; Linkage</b>				
<b>Prereq 1</b> Smart Location		1	Y NA	Infill site - close to centre of Region's transit system
<b>Prereq 2</b> Proximity to Water and Wastewater Infrastructure		1	Y NA	Existing core civil infrastructure adequate for buildout.
<b>Prereq 3</b> Imperilled Species and Ecological Communities		1	Y NA	No imperilled species expected
<b>Prereq 4</b> Wetland and Water Body Conservation	1 or 2	Y NA	Y NA	If at flood plain level then demonstrate urban mapping
<b>Prereq 5</b> Agricultural Land Conservation	2	Y NA	Y NA	Urban Infill
<b>Prereq 6</b> Floodplain Avoidance	2	Y NA	Y NA	Urban Infill
<b>Credit 1</b> Brownfield Redevelopment		2	N 0	Not a brownfield
<b>Credit 2</b> High Priority Brownfields Redevelopment		1	N 0	Not a brownfield
<b>Credit 3</b> Preferred Locations		2-10	Y 9	guesstimate of at least 30 miles of centreline miles/ sq mile within 1 mile radius
<b>Credit 4</b> Reduced Automobile Dependence		1-8	Y 4	guesstimated of 100 transit rides per week day within 1/4 mile of 50% of building entrances
<b>Credit 5</b> Bicycle Network		1	Y 1	Diverse use mix adjacent + bike for 15% of car capacity
<b>Credit 6</b> Housing and Jobs Proximity		1 3	Y 3	within 1/2 mile of pre-project jobs >50% dwelling units
<b>Credit 7</b> School Proximity		1	N 0	distance to school to be confirmed
<b>Credit 8</b> Steep Slope Protection		1	N 0	N/A
<b>Credit 9</b> Site Design for Habitat or Wetlands Conservation		2 1	Y 1	native plants for 90% of vegetation
<b>Credit 10</b> Restoration of Habitat or Wetlands		1	N 0	May be covered in Park design
<b>Credit 11</b> Conservation Management of Habitat or Wetlands		1	N 0	May be covered in Park design
<b>Smart Location &amp; Linkage</b>		<b>30</b>	<b>18</b>	

Prerequisite or Credit	OPTION PATH	Potential Points	Achievable? Likely Points	Comments to Achieve Level
<b>Neighborhood Pattern &amp; Design</b>				
<b>Prereq 1</b> Open Community			Y NA	No gated areas
<b>Prereq 2</b> Compact Development			Y NA	Develop above minimum densities: 7u/ac, 0.5 FAR commercial
<b>Credit 1</b> Compact Development		1-7	Y 6	5.6 Res + 0.4 Comm on area table
<b>Credit 2</b> Diversity of Uses		1-4	Y 4	Ten qualifying uses within 1/2 mile
<b>Credit 3</b> Diversity of Housing Types		1-3	Y 2	Estimated Simpson diversity index of 0.6
<b>Credit 4</b> Affordable Rental Housing		1-2	N 0	City demographic calculation required
<b>Credit 5</b> Affordable For-Sale Housing		1-2	N 0	City demographic calculation required
<b>Credit 6</b> Reduced Parking Footprint		2	Y 2	No visible surface lots, and 10% bike & carpool
<b>Credit 7</b> Walkable Streets		4-8	Y 8	Extensive urban design criteria to be met
<b>Credit 8</b> Street Network		1-2	Y 2	Street grid density above 30 centreline mi. per sq. mi.
<b>Credit 9</b> Transit Facilities		1	Y 1	Safe, illuminated transit stops with information
<b>Credit 10</b> Transportation Demand Management		2	Y 0	Achievable but subject to transit policy
<b>Credit 11</b> Access to Surrounding Vicinity		1	Y 1	Through-street every 800 feet max
<b>Credit 12</b> Access to Public Spaces		1	Y 1	1/6ac park within 1/2 mi. of 90% of dwellings
<b>Credit 13</b> Access to Active Public Spaces		1	Y 1	1ac park within 1/2 mi. or bikeway within 1/4 mi or gym/rec. centre within 1/4 of 90% of dwellings
<b>Credit 14</b> Universal Accessibility		1	Y 1	20% accessible housing of all types
<b>Credit 15</b> Community Outreach and Involvement		1	Y 1	Active public participation required in all phases
<b>Credit 16</b> Local Food Production		1	Y 0	Possible to provide growing space/ community gardens
<b>Neighborhood Pattern &amp; Design</b>		<b>39</b>	<b>30</b>	

PRELIMINARY CHECKLIST

VIA ARCHITECTURE

## LEED for Neighbourhood Development

Prerequisite or Credit	OPTION PATH	Points	Achievable? Likely Points	Comments to Achieve Level
<b>Green Construction &amp; Technology</b>				
<b>Prereq 1</b> Construction Activity Pollution Prevention			Y NA	Prevent erosion, sedimentation, air and water pollution during construction
<b>Credit 1</b> LEED Certified Green Buildings		1-3	Y 0	LEED certification for 20-40% of buildings
<b>Credit 2</b> Energy Efficiency in Buildings		1-3	Y 0	90% of buildings energy efficient over ASHRAE or ENERGY STAR. Conduct whole building energy simulations - various compliance paths
<b>Credit 3</b> Reduced Water Use		2 1-3	Y 1	Point for nonpotable or eliminating irrigation
<b>Credit 4</b> Building Reuse and Adaptive Reuse		1-2	Y 2	Re-use 50% of 1 build (measured on surface area) + equiv of 2nd
<b>Credit 5</b> Reuse of Historic Buildings		1	Y 1	Incorporate 1 Historic Building
<b>Credit 6</b> Minimize Site Disturbance through Site Design		1	Y 1	development footprint is 100% previously developed
<b>Credit 7</b> Minimum Site Disturbance during Construction		1	Y 1	development footprint is 100% previously developed
<b>Credit 8</b> Contaminant Reduction in Brownfields Remediation		1	N 0	Not a brownfield site
<b>Credit 9</b> Stormwater Management		1-5	Y 0	Safest to assume infiltration rates not achievable with
<b>Credit 10</b> Heat Island Reduction		1 1	Y 1	50% parking spaces under cover
<b>Credit 11</b> Solar Orientation		1	N 0	Unrealistic criteria based on east-west orientation
<b>Credit 12</b> On-Site Energy Generation		1	N 0	5% of project's electrical requirements generated on site with low CO2
<b>Credit 13</b> On-Site Renewable Energy Sources		1	N 0	5% of project's electrical requirements generated on site through renewable sources
<b>Credit 14</b> District Heating and Cooling		1	N 0	80% connected to district heating and cooling achieving 80% of need
<b>Credit 15</b> Infrastructure Energy Efficiency		1	Y 1	all district lights, pumps, and treatment systems perform 15% better than baseline
<b>Credit 16</b> Wastewater Management		1	N 0	Divert 50% of wastewater, provide onsite treatment
<b>Credit 17</b> Recycled Content in Infrastructure		1	Y 1	90% recycled aggregate in concrete, 25% fly ash, or equivalent for roads, parking lots, sidewalks and curbs
<b>Credit 18</b> Construction Waste Management		1	Y 1	Reduce or salvage 50% of construction debris not land-clearing or excavation
<b>Credit 19</b> Comprehensive Waste Management		1	Y 0	2 of 3: Hazardous materials dropoff, recycling and reuse station, compost station
<b>Credit 20</b> Light Pollution Reduction		1	Y 1	Light to minimums of safety and comfort. Light infiltration maximums per project IESNA zoning
<b>Green Construction &amp; Technology</b>		<b>31</b>	<b>11</b>	

Prerequisite or Credit	OPTION PATH	Points	Achievable? Likely Points	Comments to Achieve Level
<b>Innovation &amp; Design Process</b>				
<b>Credit 1</b> Innovation in Design		1-5	Y 1	Requires exceptional performance under any credit or innovation
<b>Credit 2</b> LEED Accredited Professional		1	Y 1	LEED Professionals on team
<b>Innovation &amp; Design Process</b>		<b>6</b>	<b>2</b>	

Project Number: 55907 - Project Name: Kelowna CD-1 Urban Plan Date: March 24, 2008

LEED ND Grand Total: 106 **61**

Certified: 40-49 points; Silver: 50-59 points; Gold: 60-79 points; Platinum: 80-106 points

PRELIMINARY CHECKLIST

VIA ARCHITECTURE



VIA ARCHITECTURE



# Sustainability – The Measurable?

## LEED for Neighbourhood Development

Project Number: 55907 - Project Name: Kelowna CD-1 Urban Plan - Date: March 24, 2008

Prerequisite or Credit	OPTION PATH	Potential Points	Achievable?	Likely Points	Comments to Achieve Level
<b>Smart Location &amp; Linkage</b>					
Prereq 1 Smart Location	1		Y	NA	Int
Prereq 2 Proximity to Water and Wastewater Infrastructure	1		Y	NA	Ex
Prereq 3 Imperilled Species and Ecological Communities	1		Y	NA	N
Prereq 4 Wetland and Water Body Conservation	1 or 2		Y	NA	If
Prereq 5 Agricultural Land Conservation	2		Y	NA	U
Prereq 6 Floodplain Avoidance	2		Y	NA	U
Credit 1 Brownfield Redevelopment		2	N	0	N
Credit 2 High Priority Brownfields Redevelopment		1	N	0	N
Credit 3 Preferred Locations		2-10	Y	9	gu m
Credit 4 Reduced Automobile Dependence		1-8	Y	4	gu m
Credit 5 Bicycle Network		1	Y	1	Di
Credit 6 Housing and Jobs Proximity	1	3	Y	3	wi
Credit 7 School Proximity		1	N	0	di
Credit 8 Steep Slope Protection		1	N	0	N
Credit 9 Site Design for Habitat or Wetlands Conservation	2	1	Y	1	ne
Credit 10 Restoration of Habitat or Wetlands		1	N	0	M
Credit 11 Conservation Management of Habitat or Wetlands		1	N	0	M
<b>Smart Location &amp; Linkage</b>		<b>30</b>		<b>18</b>	

Prerequisite or Credit	OPTION PATH	Potential Points	Achievable?	Likely Points	Comments to Achieve Level
<b>Neighborhood Pattern &amp; Design</b>					
Prereq 1 Open Community			Y	NA	N
Prereq 2 Compact Development			Y	NA	De
Credit 1 Compact Development		1-7	Y	6	5
Credit 2 Diversity of Uses		1-4	Y	4	Te
Credit 3 Diversity of Housing Types		1-3	Y	2	Es
Credit 4 Affordable Rental Housing		1-2	N	0	Ci
Credit 5 Affordable For-Sale Housing		1-2	N	0	Ci
Credit 6 Reduced Parking Footprint		2	Y	2	N
Credit 7 Walkable Streets		4-8	Y	8	Ex
Credit 8 Street Network		1-2	Y	2	St
Credit 9 Transit Facilities		1	Y	1	Sa
Credit 10 Transportation Demand Management		2	?	0	Ac
Credit 11 Access to Surrounding Vicinity		1	Y	1	Th
Credit 12 Access to Public Spaces		1	Y	1	1/
Credit 13 Access to Active Public Spaces		1	Y	1	1a
Credit 14 Universal Accessibility		1	Y	1	20
Credit 15 Community Outreach and Involvement		1	Y	1	Ac
Credit 16 Local Food Production		1	?	0	Pe
<b>Neighborhood Pattern &amp; Design</b>		<b>39</b>		<b>30</b>	

PRELIMINARY CHECKLIST

## LEED for Neighbourhood Development

Prerequisite or Credit	OPTION PATH	Potential Points	Achievable?	Likely Points	Comments to Achieve Level
			Y	NA	Prevent erosion, sedimentation, air and water pollution during construction
	1-3	?	0		LEED certification for 20-40% of buildings
	1-3	?	0		90% of buildings energy efficient over ASHRAE or ENERGY STAR. Conduct whole building energy simulations - various compliance paths
2	1-3	Y	1		Point for nonpotable or eliminating irrigation
	1-2	Y	2		Re-use 50% of 1 build (measured on surface area) + equiv of 2nd
	1	Y	1		Incorporate 1 Historic Building
	1	Y	1		development footprint is 100% previously developed
	1	Y	1		development footprint is 100% previously developed
	1	N	0		Not a browfield site
	1-5	?	0		Safest to assume infiltration rates not achievable with
1	1	Y	1		50% parking spaces under cover
	1	N	0		Unrealistic criteria based on east-west orientation
	1	N	0		5% of project's electrical requirements generated on site with low CO2
	1	N	0		5% of project's electrical requirements generated on site through renewable sources
	1	N	0		80% connected to district heating and cooling achieving 80% of need
	1	?	1		all district lights, pumps, and treatment systems perform 15% better than baseline
	1	N	0		Divert 50% of wastewater, provide onsite treatment
	1	?	1		90% recycled aggregate in concrete, 25% fly ash, or equivalent for roads, parking lots, sidewalks and curbs
	1	Y	1		Reduce or salvage 50% of construction debris not land-clearing or excavation
	1	?	0		2 of 3: Hazardous materials dropoff, recycling and reuse station, compost station
	1	?	1		Light to minimums of safety and comfort. Light infiltration maximums per project IESNA zoning
		<b>31</b>		<b>11</b>	

OPTION PATH	Potential Points	Achievable?	Likely Points	Comments to Achieve Level
1-5	Y	1		Requires exceptional performance under any credit or innovation
1	Y	1		LEED Professionals on team
<b>6</b>			<b>2</b>	

wna CD-1 Urban Plan - Date: March 24, 2008

106 **61**

Gold: 60-79 points; Platinum: 80-106 points

VIA ARCHITECTURE



VIA ARCHITECTURE

# Getting There





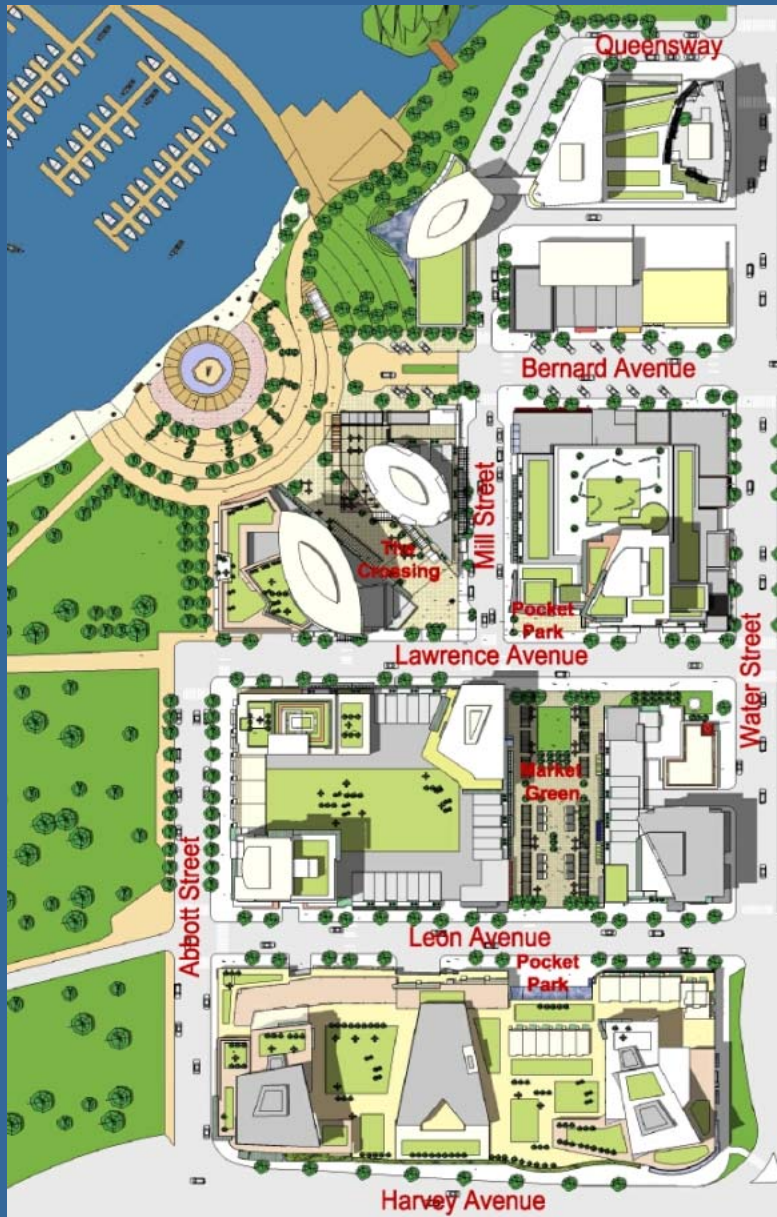
# Getting There



# Getting There





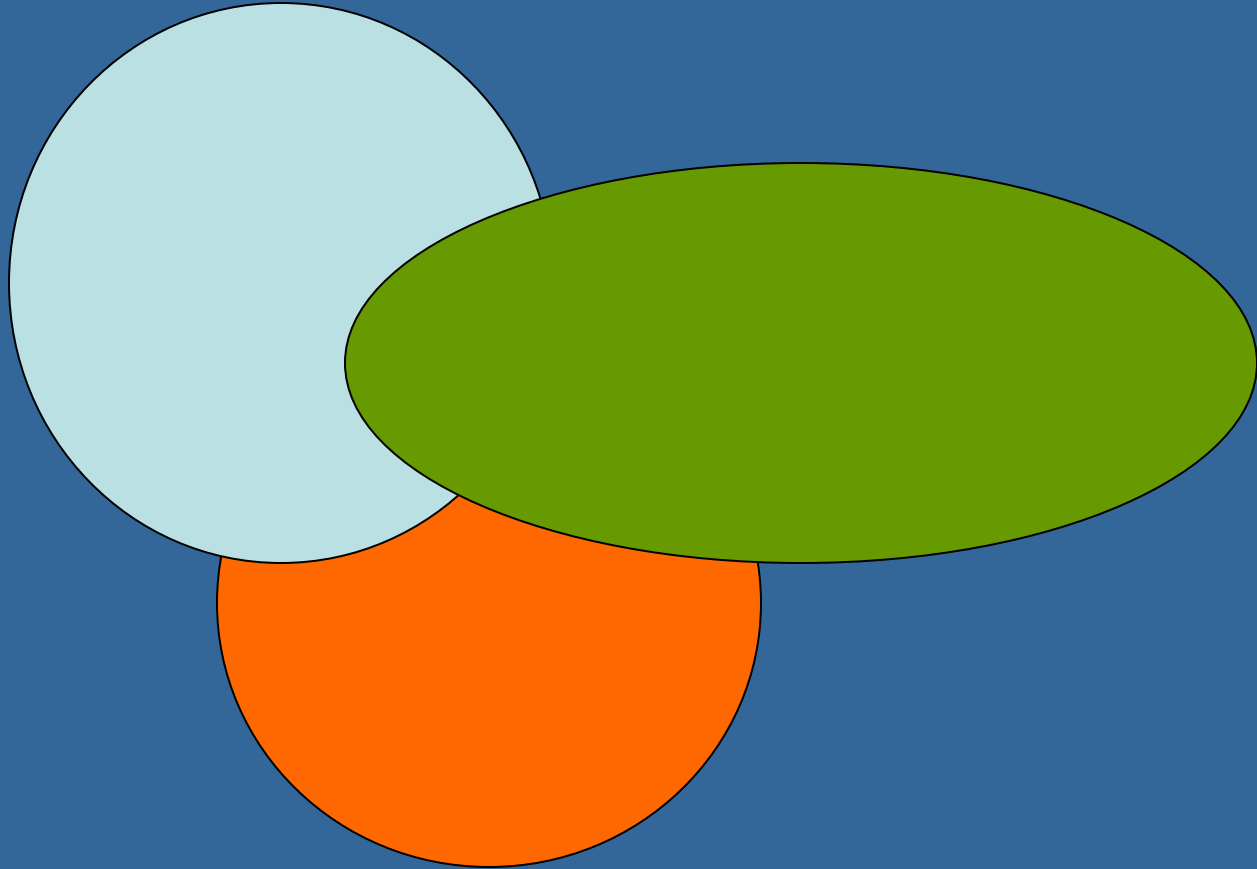


**Kelowna Downtown  
Rethinking, Remaking, Reinventing**



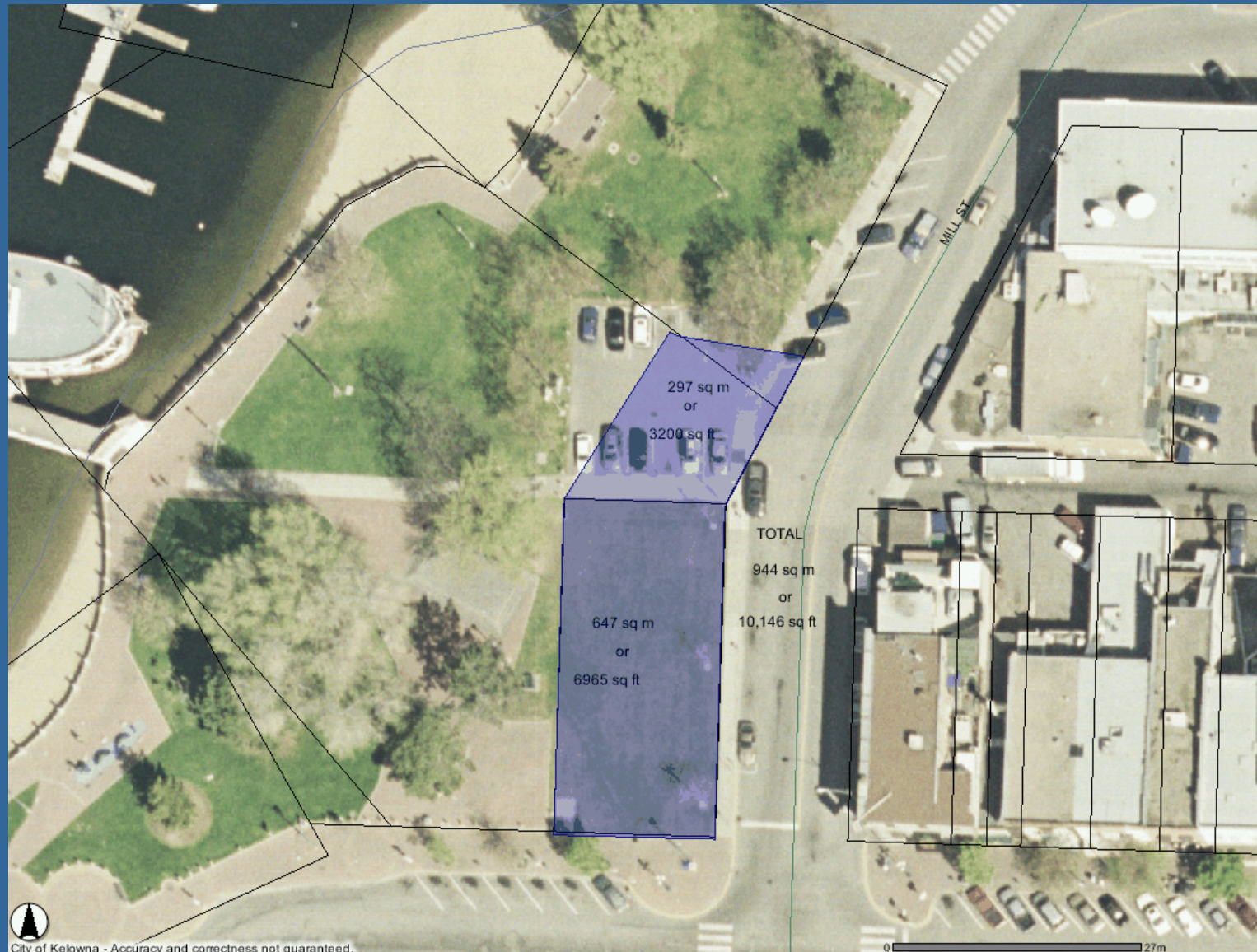
VIA ARCHITECTURE

# RESOURCE SLIDES





# Park Enhancement (Royal Trust Site)

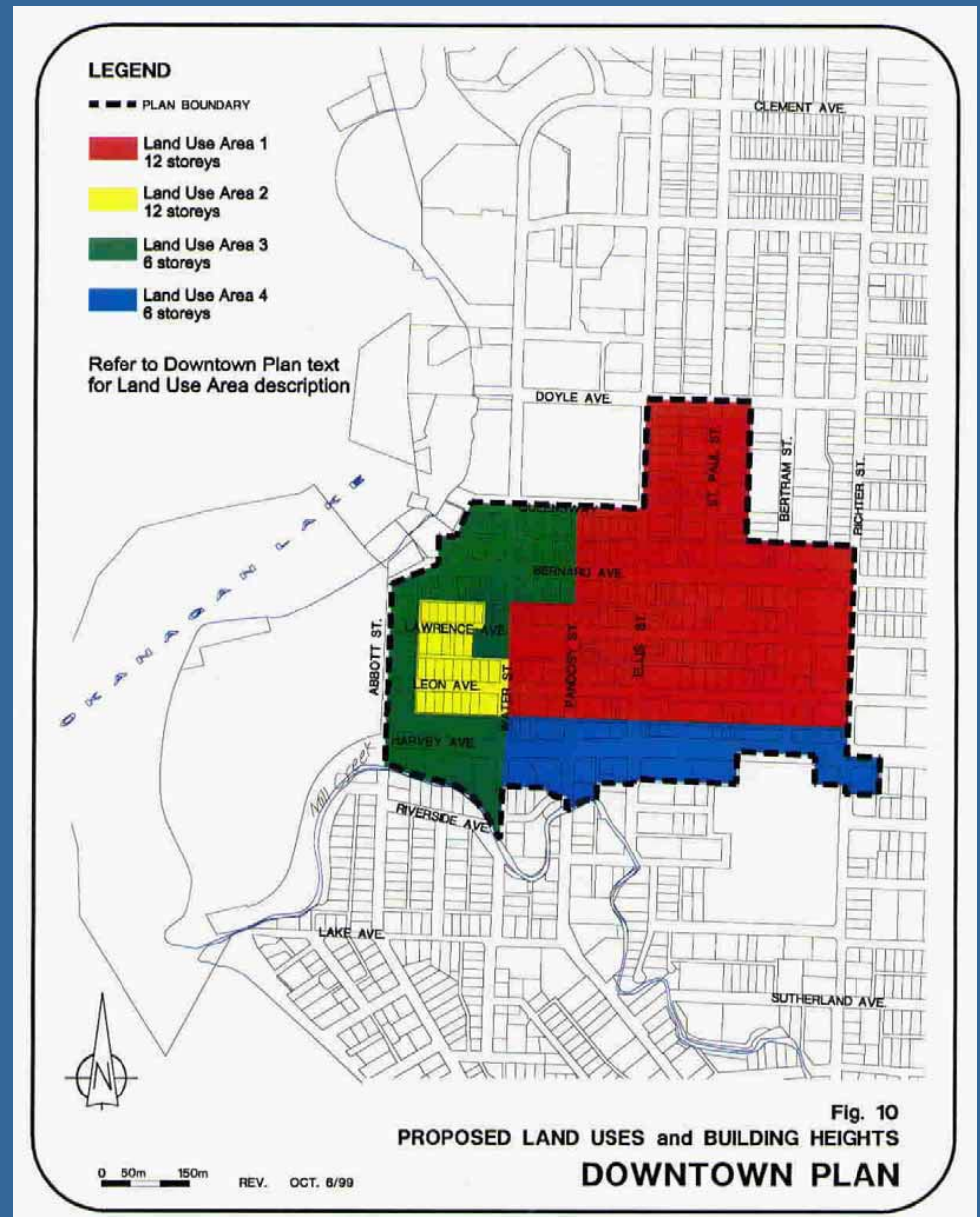


City of Kelowna - Accuracy and correctness not guaranteed.



VIA ARCHITECTURE

# DOWNTOWN PLAN (Land Use & Heights)

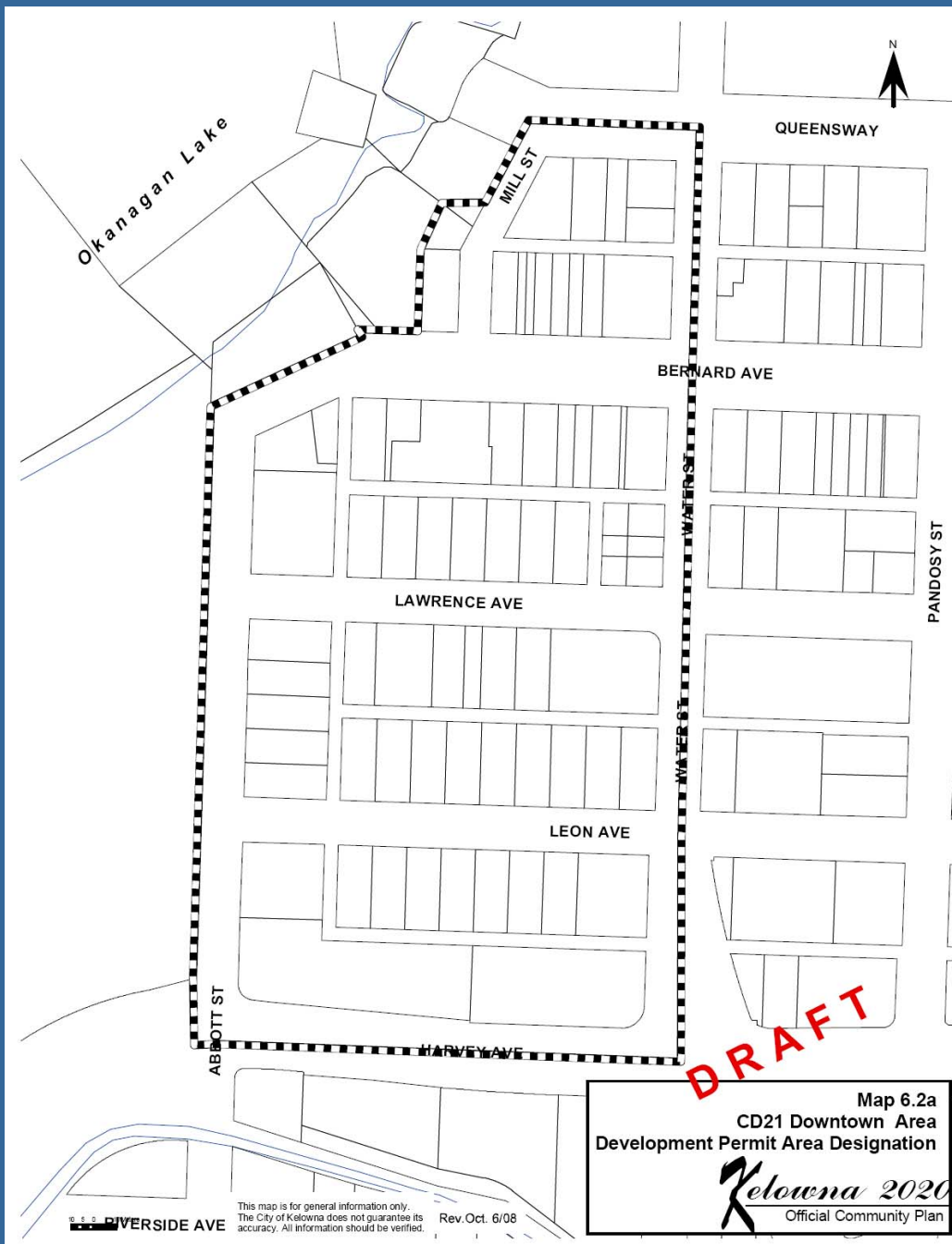




# COMMUNITY AMENITIES

1. Streetscape Construction
  2. Plaza Construction
  3. Public Washrooms
  4. Children's Playground
  5. Indoor Civic Amenity Space
    - a.) Daycare
    - b.) Multi-use facility
  7. Public Pier
- (\*\*A 25% portion to be allocated to CD Amenity)
8. Affordable Housing





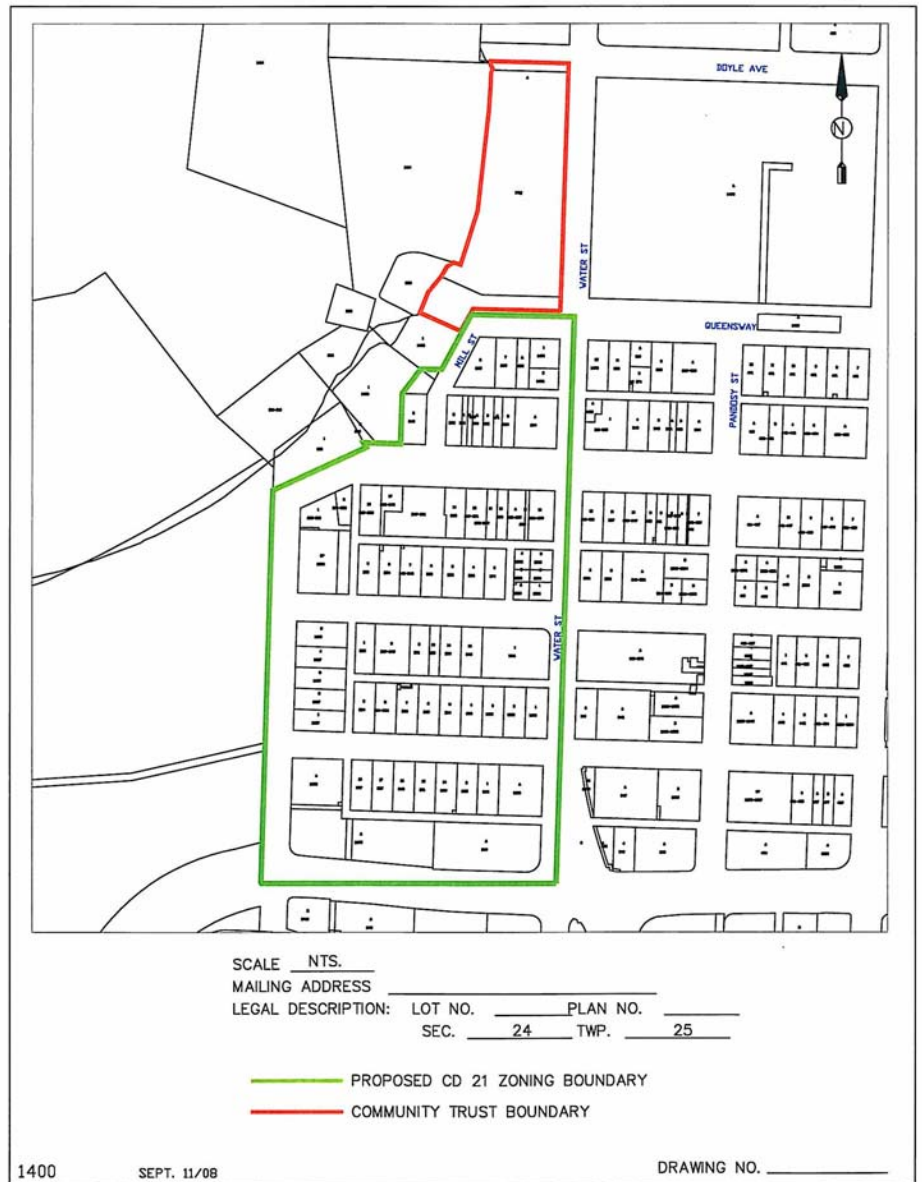
# Proposed CD-21 DP Area



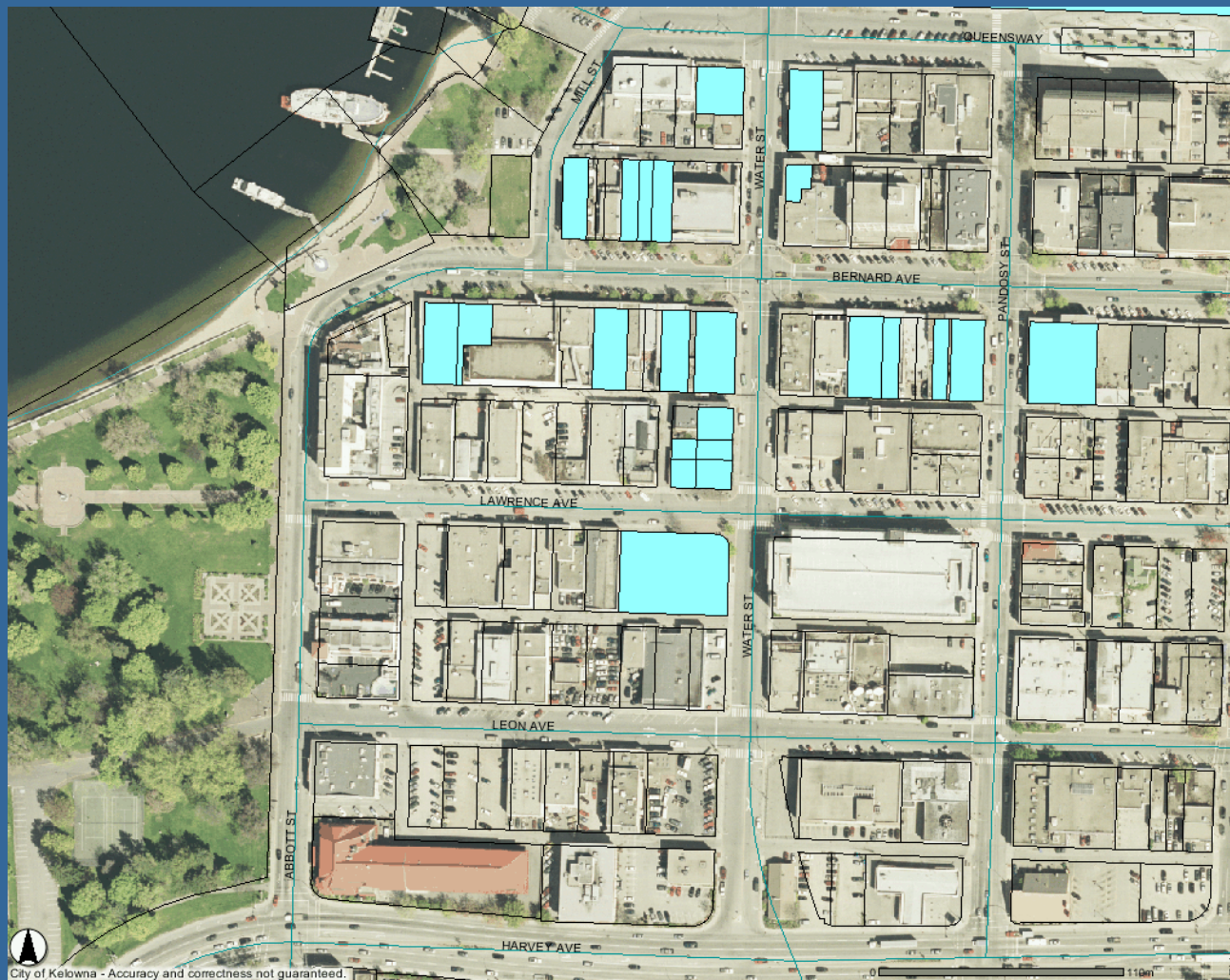
VIA ARCHITECTURE



# Community Trust Area



# Heritage Acknowledged Properties



City of Kelowna - Accuracy and correctness not guaranteed.



VIA ARCHITECTURE



# COMMUNITY AMENITIES CONTRIBUTIONS

- |   |                  |
|---|------------------|
| 1. Streetscape Construction                 | • \$7.75 Million |
| 2. Plaza Construction                       | • \$1.59 Million |
| 3. Public Washrooms                         | • \$300k         |
| 4. Children's Playground                    | • \$38k          |
| 5. Indoor Civic Amenity Space               | • \$2.9 Million  |
| a.) Daycare                                 |                  |
| b.) Multi-use facility                      |                  |
| 7. Public Pier                              | • \$1.69 Million |
| (**A portion to be allocated to CD Amenity) |                  |
| 8. Affordable Housing                       | • \$2.45 Million |
| 9. Additional Public Land                   | • \$6 Million    |

**From:** Weldon LeBlanc [Weldon@kelownachamber.org]  
**Sent:** June 6, 2008 12:37 PM  
**To:** mayorandcouncil; Sharon Shepherd  
**Cc:** Jan Johnston; Doug Gilchrist; Ron Mattiussi; Chamber President  
**Subject:** Comprehensive Development Zone

Mayor Shepherd and Members of Kelowna City Council  
City of Kelowna  
1435 Water Street  
Kelowna, BC V1Y 1J4

Dear Mayor Shepherd and Members of Kelowna City Council:

On behalf of the Kelowna Chamber of Commerce, please accept our congratulations for initiating the Comprehensive Development Zone process currently underway for the four block area of the downtown core bounded by Harvey Avenue, Water Street, Abbott Street, and Mill Street. Through the foresight and leadership of Kelowna City Council, this vision will create an atmosphere of certainty for investors and create new amenities such as housing, park space, access to the waterfront, residential, and commercial development. Through consultation with Downtown Kelowna Association, City of Kelowna staff, and various stakeholders, we have prepared the attached document which summarizes our comments on the CD Zone process to date. As indicated in the document, while there has been a great deal accomplished to date, we suggest that there are areas which require further investigation to move this process along. In the spirit of cooperation and partnership, we have summarized these areas in the following recommendations.

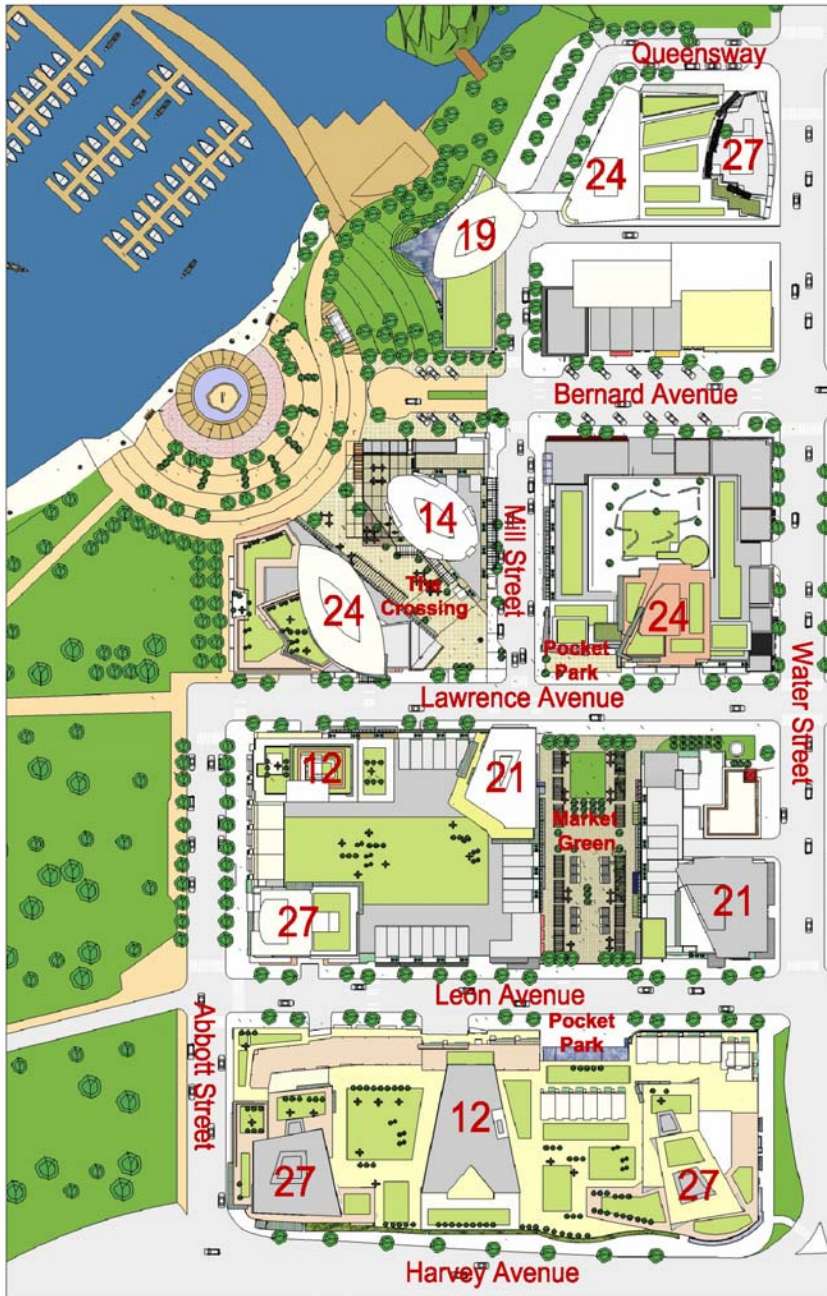
- undertake a detailed parking analysis of the Comprehensive Development Zone to assess the parking needs of the area, and the impact on the surrounding downtown area; including an analysis of parking of vehicles with boat trailers
- assess the need for additional boat moorage for residents in the downtown and the availability of public dock space to accommodate day-boaters in conjunction with the preparation of the Waterfront Parks Plan,
- ideally undertake the creation of a new Downtown Plan to be conducted simultaneously as the CD Zone, or at a minimum create a process which will allow and ensure that the CD Zone complement a future Downtown Plan
- develop the Royal Trust Site with the inclusion of a hotel development as proposed in the CD Zone vision
- ensure that the City of Kelowna has adequate staffing to oversee the implementation of the CD Zone and manage the unprecedented growth occurring throughout the City of Kelowna

Again, congratulations on leading the community through this positive visioning process. The Kelowna Chamber appreciates the opportunity to provide input on developing a vision for this key area of our downtown. We trust you accept these comments in a spirit of cooperation, and we look forward to your response.

- Sincerely,
- James Paterson, President
- **Kelowna Chamber of Commerce**
- **For additional information contact:**
- **Weldon LeBlanc, CEO, Kelowna Chamber of Commerce**







# Plan View

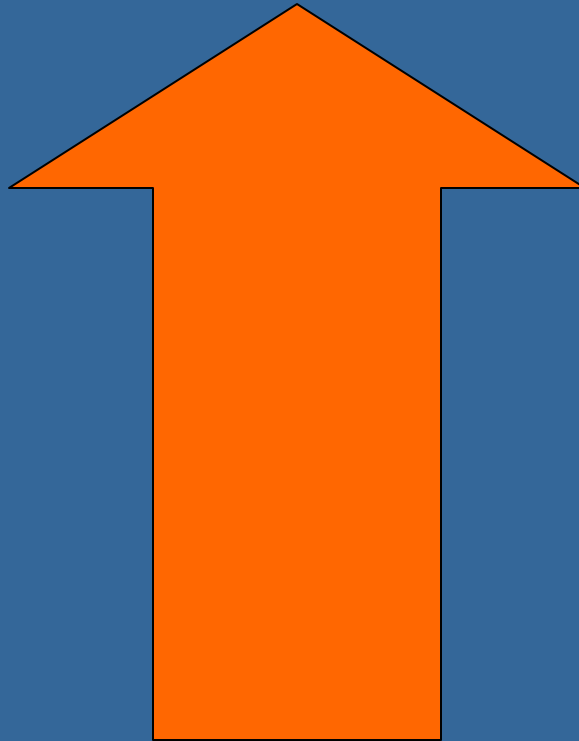
# Royal Trust Site Exclusion From CD-21– Cost Implications

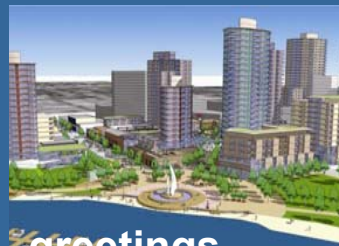
- Site Value:  
\$3 - 4 Million  
(min. 10% discount if leased)
- Amenity Contribution:  
\$90,000 approx.
- Additional Park Construction  
\$ ??
- Annual Taxation Revenue  
\$372,600





# RESOURCE SLIDES





VIA ARCHITECTURE