

MIXED MODAL

CO-HOUSING | CO-WORKING | CO-ACTIVE

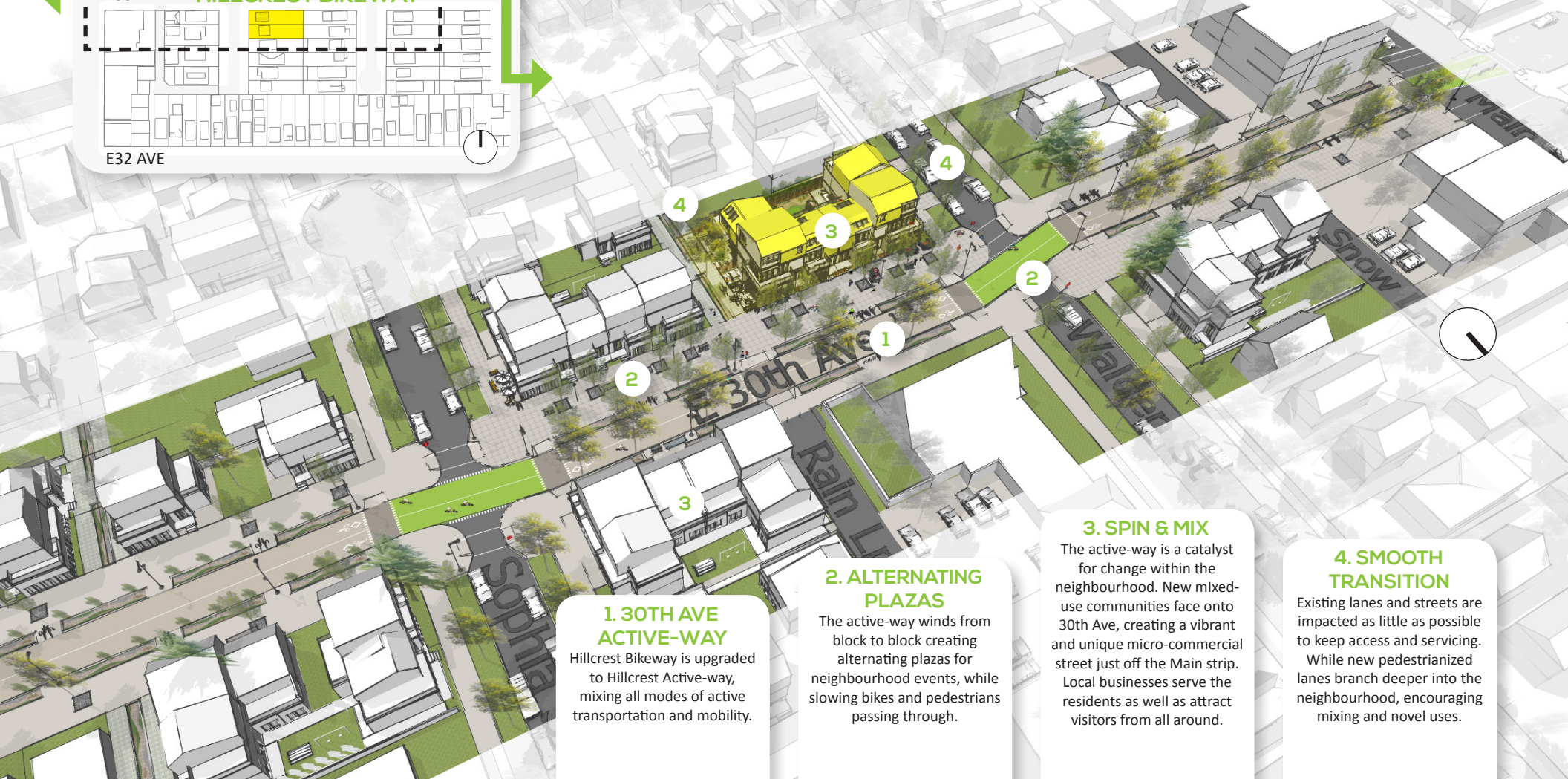
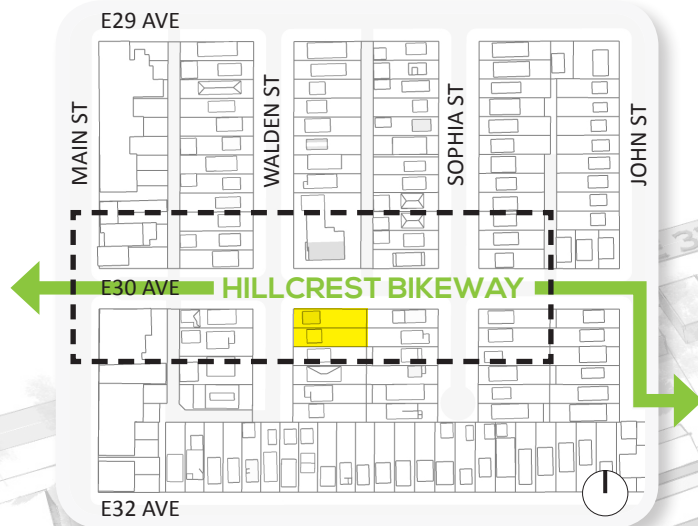
The future of mobility in Vancouver will be active. Designated active-mobility ways already permeate the city; with bikeways connecting parks, commercial streets, community centres, work centres, schools, and residential neighbourhoods efficiently and safely for non-car users much of the year. These routes discourage vehicular traffic, except for local use.

Mixed Modal takes its cue from the Hillcrest Bikeway, which passes through the site and seeks to eliminate car circulation on this route to further enhance safety and increase the appeal to a variety of people using scooters, bikes, hoverboards, and skateboards, as well as pedestrians. By slowing the speed of travelers, this route becomes the prime vector for neighbourhood-integrated commercial development because small businesses are more visible to both the surrounding neighbourhood and to active commuters passing through. Larger commercial streets typically are vehicular thoroughfares and major bus-routes, and

can lead to noisy, polluted, and congested spaces for people. Whereas activated neighbourhood streets can be green, quiet, and inviting spaces for people to walk their dog and get a coffee, cyclists to pause on the way home for a few groceries, and for scooter-riders to grab a drink with friends on a patio.

This proposal looks at how properties adjacent to active-ways can combine small-scale, ground level commercial spaces with residential use above and live-work townhouses, all wrapping a vibrant communal courtyard. Alongside a redesigned, car-free active-way, small commercial spaces can be creatively integrated into existing residential areas.

By encouraging locally-run commercial nodes and increasing residential density in a bold form that works with the typical Vancouver residential block, the Mixed Modal concept will be a catalyst for friendly, neighbourhood intensification.



1. 30TH AVE ACTIVE-WAY

Hillcrest Bikeway is upgraded to Hillcrest Active-way, mixing all modes of active transportation and mobility.

2. ALTERNATING PLAZAS

The active-way winds from block to block creating alternating plazas for neighbourhood events, while slowing bikes and pedestrians passing through.

3. SPIN & MIX

The active-way is a catalyst for change within the neighbourhood. New mixed-use communities face onto 30th Ave, creating a vibrant and unique micro-commercial street just off the Main strip. Local businesses serve the residents as well as attract visitors from all around.

4. SMOOTH TRANSITION

Existing lanes and streets are impacted as little as possible to keep access and servicing. While new pedestrianized lanes branch deeper into the neighbourhood, encouraging mixing and novel uses.

URBAN DESIGN STRATEGY

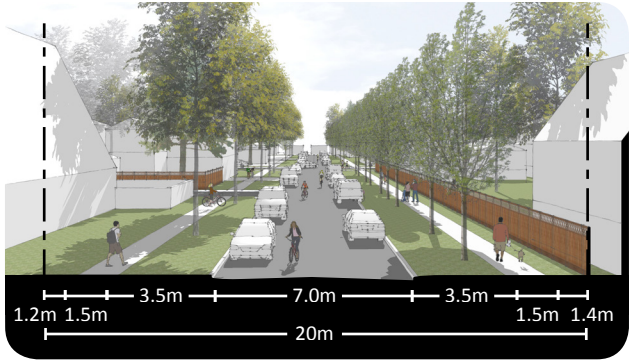
The established Hillcrest bike route along 30th Ave is transformed from a car-lined, narrow bike street, into a car-free, dedicated active-way. Within the proposed street section, existing mature trees are preserved and more planted, further enhancing the street's microclimate by providing shade on hot days and improving overall air quality.

The active-way shifts within the right-of-way, from block to block, with textured paving at pedestrian crossings to mediate the speed of commuters passing through. Generous sidewalks

allow walkers, joggers, and meanderers, to pass each other while respecting personal space. Bike racks and other public amenities are provided in the breaks between trees.

Where existing houses turn away from 30th Avenue, new commercial and mixed use interventions address it. Setbacks along the active-way are eliminated, bringing patios and retail displays into the sidewalk to further animate the street. Shaded, green, safe, and attractive, the active-way encourages the emergence of novel, mixed-use developments within the block.

EXISTING 30th AVE STREET SECTION



1. PEOPLE-FULL & CAR-FREE

Hillcrest Active-way is designed for multi-modal active transportation and pedestrians of all ages and abilities. The generous bike lane encourages riding in pairs or groups, without competition with cars.

2. EMBRACE EXISTING TREES

Mature trees on either side of 30th Ave are incorporated into the street design.

3. FAST LANE, SLOW LANE

Bioswales, trees, and utility strips separate zones for various speeds and modes of travel.

4. SPILL OUT

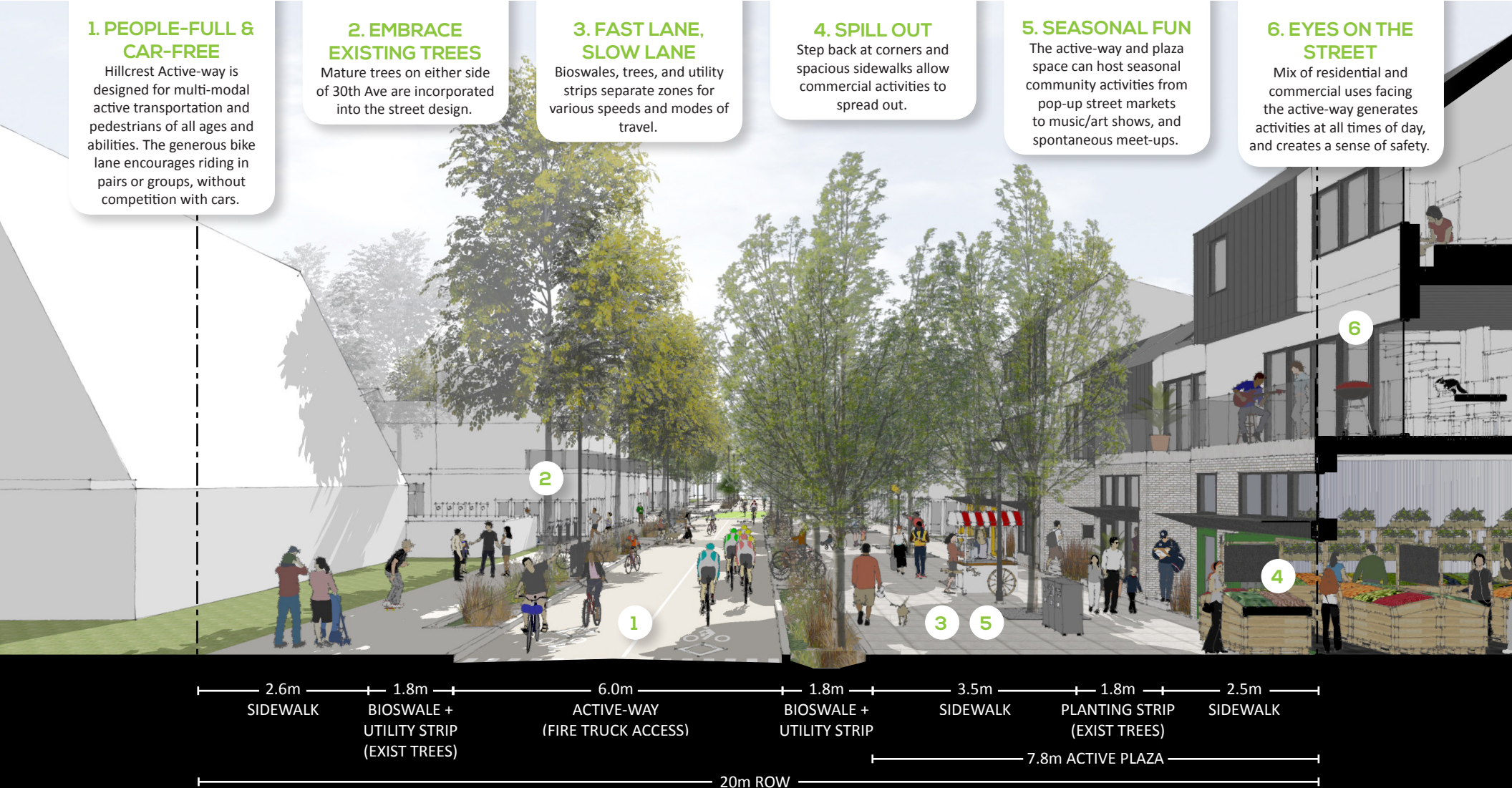
Step back at corners and spacious sidewalks allow commercial activities to spread out.

5. SEASONAL FUN

The active-way and plaza space can host seasonal community activities from pop-up street markets to music/art shows, and spontaneous meet-ups.

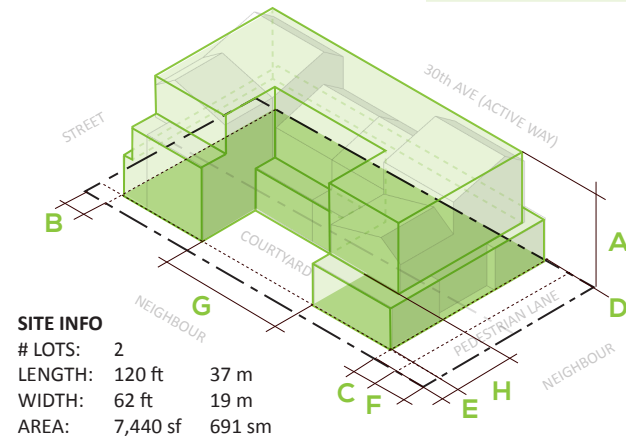
6. EYES ON THE STREET

Mix of residential and commercial uses facing the active-way generates activities at all times of day, and creates a sense of safety.

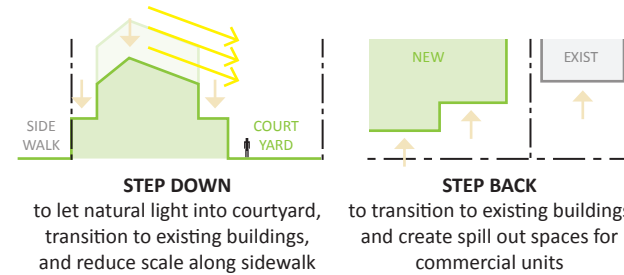


PROPOSED ZONING

	CURRENT ZONING	PROPOSED ZONING
	RS-1	MX-1
FAR	0.6	1.2-1.5
TOTAL UNITS	2	10
RESIDENTIAL UNITS	YES	YES
LIVE/WORK UNITS	NO	YES
COMMERCIAL UNITS	NO	YES
PARKING	ON SITE PARKING ALLOWED	DESIGNATED CAR-SHARE STREET PARKING



	CURRENT ZONING			PROPOSED ZONING		
		sf	sm		sf	sm
MAX FAR	0.6	4,464	415	1.5	11,160	836
BLDG COVERAGE	-	NONE	-	55%	4,464	383
	%	ft	m	%	ft	m
A HEIGHT	-	35	10.7	-	37	11.3
B FRONT SETBACK	20%	24	7.32	5%	6	2.1
C REAR SETBACK	40%	48	14.63	5%	6	2.1
D ACTIVE WAY SETBACK	10%	6.2	1.89	0%	0	0.0
E SIDE SETBACK	10%	6.2	1.89	10%	6.2	1.8
F LANE SETBACK	-	NONE	-	-	9.8	3.0
G COURTYARD	-	NONE	-	-	40	12
H COURTYARD	-	NONE	-	-	20	6



VIEW OF DEVELOPMENT FROM 30TH AVE ACTIVE WAY MID-BLOCK CROSSING

ECONOMIC STRATEGY

Two neighbours, looking to downsize and create affordable homes and commercial spaces in their neighbourhood for their younger, like-minded friends, decide to build a modest, sustainable, mixed-use co-housing development on their combined properties. They sell their land to the co-housing entity they have created at the cost of the BC 2021 Assessment. After construction, the development will operate on a strata structure, as this will be well-recognized by lenders.

Development revenues are increased and construction costs lowered by replacing on-site parking with increased sellable space. Grants from BC Hydro and other organizations further reduce costs. Units are sold at \$850/sf, comparable to nearby listings. Flex spaces could also be rented to outside entities if desired. Revenue from commercial units is calculated over 15 years on the assumption that a longer construction loan period can be secured by the group. Ongoing operational expenses would be covered by strata fees.

COSTS

COST TYPE	DESCRIPTION	UNIT COST	COST
LAND	4604 Walden	2021 Assess.	\$2,006,000.00
LAND	4622 Walden	2021 Assess.	\$1,797,800.00
LAND COSTS SUBTOTAL			\$3,803,800.00
BUILDING	8,744 sf	\$270/sf (AVERAGE)	\$2,359,600.00
SITE IMPROV.		10.50%	\$247,758.00
HARD COSTS SUBTOTAL			\$2,607,358.00
SOFT COSTS	Permits, Fees, Etc.	30%	\$782,207.40
	Arch/Eng. Fees	7.0%	\$182,515.06
	Loan Interest	4%	\$256,446.32
	Grants		-\$75,000.00
SOFT COSTS SUBTOTAL			\$1,221,168.78
TOTAL PROJECT COSTS			\$7,557,326.78

REVENUE

UNIT SALES *	RESIDENTIAL	4 @ \$850/sf	\$4,278,050.00
	LIVE/WORK	2 @ \$835/sf	\$1,589,500.00
LEASE **	COMMERCIAL	3 @ \$60/SF/YR	\$2,009,535.75
TOTAL REVENUE			\$7,877,085.75

* each unit includes at grade flex space @ \$680/sf

** 3 5-yr commercial leases w/ adjustment for inflation

DESIGN RATIONALE

Mixed Modal proposes to combine appealing pedestrian-oriented commercial units and family-friendly residential density in an articulated form which fits sensitively with the surrounding residential scale.

Implenting a 1.2 FSR massing distributed between two- and three-storey volumes wrapped around a shared residential courtyard on two standard-size properties, the concept could be increased in scale to 1.5 FSR as the neighbourhood grows denser.

UNIT #	LIVE SF	FLEX SF	BALC SF	UNIT TYPE
01	1060	135	296	2 BED
02 + 03	914	-	-	COMMERCIAL
04	1500	140	140	3 BED
05	850	140	220	1 BED LIVE/WORK
06	850	140	220	1 BED LIVE/WORK
07	1500	140	140	3 BED
08	610	-	-	COMMERCIAL
09	732	110	200	JR 1 BED
10	418	-	-	ACCESSIBLE STUDIO / COMMERCIAL



LEVEL 1



LEVEL 2



LEVEL 3

MIXING | PUBLIC

The taller forms marking the corners of the building identify the ground level retail spaces such as grocery shops or cafes, and contain family-sized residential townhouses above. Setback between the corner massings are a pair of two-storey live-work spaces suited to artist studios and independent professionals.

Residential entrances alternate between the commercial and workspaces, stepped back and up from the street frontage to create a physical separation from the sidewalk. To maintain human-scale storefronts, allow for more daylight, and create

private outdoor space, the second level steps back from the property line along 30th Avenue. As the building transitions toward the adjacent single family homes, the form steps again with a smaller two-bedroom townhouse over commercial facing Walden Street and a single storey one-bedroom over a small commercial or accessible residential unit facing the new pedestrian-only lane. These upper units enjoy generous private terraces to the south as they are set away from the neighbouring property. This stepback also brings sunlight into the communal courtyard.

VIEW OF UNIT & COURTYARD ENTRY FROM WALDEN ST



1. RAINY RIDE

Jessica is renting the ground floor to Rainy Ride, but next year plans to convert it into a wheelchair accessible studio so she can live with her brother.

2. CLOUDY DAY GAME CAFE

Owners Sam and Melville live in their 3 bedroom unit upstairs, with their family of 2 dogs and 1 cat. Sam works from home as a financial consultant while Melville runs the cafe.

3. FOG SOFTWARE LTD

Hip new startup run by Sunny and Brad, partners in business and in life, out of their 1 bedroom live/work loft, with plenty of patio space for entertainment.

4. CALM CO.

Jyoti's day job is a graphic designer but her passion is massage therapy. She runs her burgeoning business on evenings and weekend from her 1 bedroom live/work loft.

5. PLAZA DAYS

Pop-up shops, markets, and even neighbourhood garage sales take over the plaza space every other week.

6. SUNSHINE MARKET

A mom and pop and daughter shop. Home is just upstairs, with mom and pop in the 2 bed unit, and their daughter's family of four in the 3 bedroom unit.

MIXING | PRIVATE

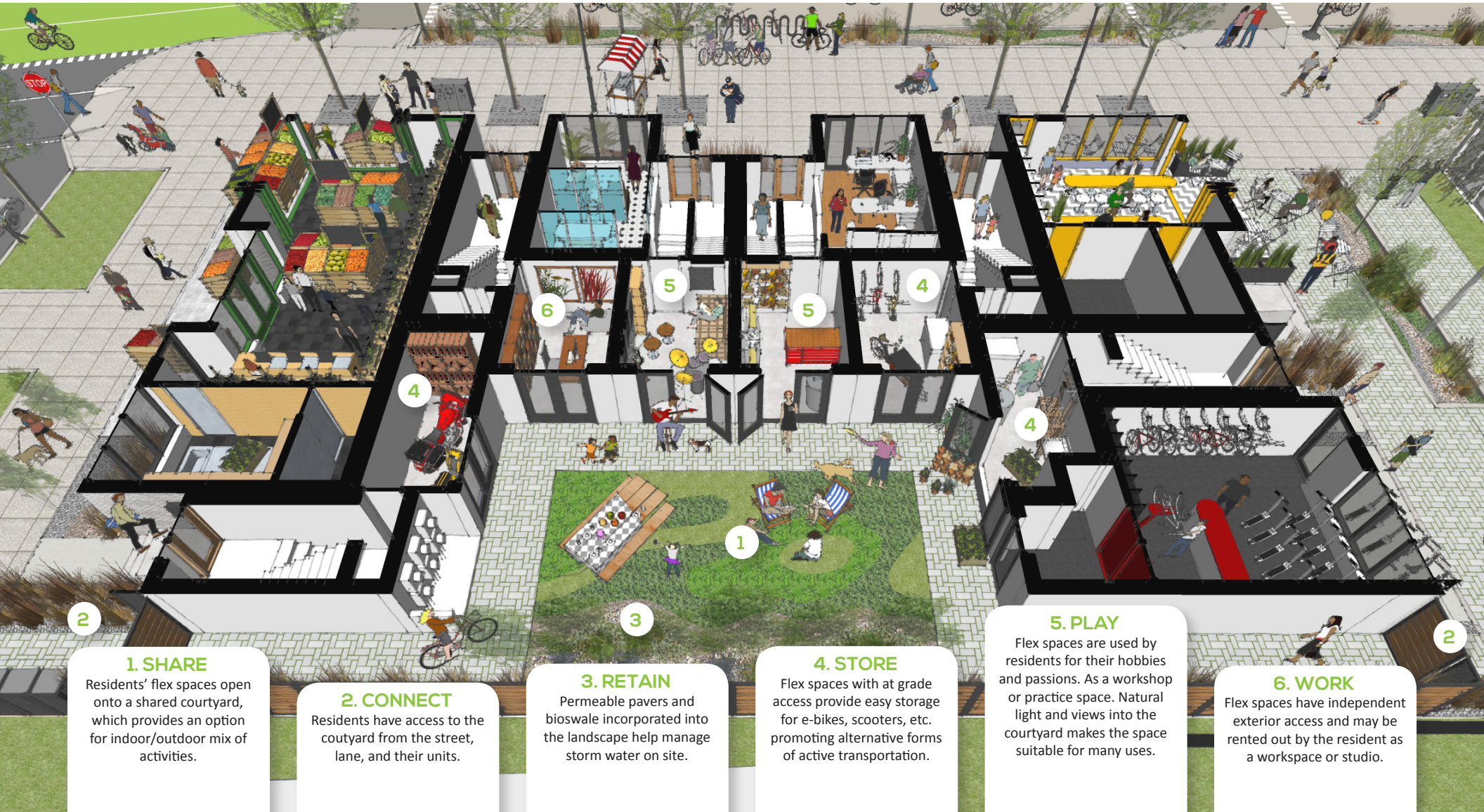
The courtyard is shared between the residential units, to provide at grade green space in addition to the private outdoor terraces and balconies on level two. Gates at the east and west sides of the property lead to the central space, where permeable paving surrounds a garden space which could be planted for children to play on or used as a vegetable garden. Rainwater is able to infiltrate the ground through the rain garden at the south side.

Access from the living space is through the residential units' flex spaces. There is one for each residential unit surrounding the

courtyard, and these could be used as workshops, art or music studios, private offices, or bike and other storage. Thus, messier or noisier activities can occur with some physical separation from the other spaces, but also can become opportunities for impromptu conversations and collaborative projects between neighbours. Patio doors and transom windows bring in ample light.

Recycling and other services continue to be picked on Walden Street, as no lane served the properties previously.

VIEW OF COURTYARD & FLEX SPACES



2

1. SHARE

Residents' flex spaces open onto a shared courtyard, which provides an option for indoor/outdoor mix of activities.

2. CONNECT

Residents have access to the courtyard from the street, lane, and their units.

3. RETAIN

Permeable pavers and bioswale incorporated into the landscape help manage storm water on site.

4. STORE

Flex spaces with at grade access provide easy storage for e-bikes, scooters, etc. promoting alternative forms of active transportation.

5. PLAY

Flex spaces are used by residents for their hobbies and passions. As a workshop or practice space. Natural light and views into the courtyard makes the space suitable for many uses.

6. WORK

Flex spaces have independent exterior access and may be rented out by the resident as a workspace or studio.