

## Constellations of the In-between

### Architectural Speculations in Metro Vancouver's Interstices

*one never commences; one never has a tabula rasa;  
one slips in, enters in the middle*

*(Gilles Deleuze)*

The city, far from being a physical object with a coherent view, is a complex assemblage of material and immaterial events unfolding in space and time. Against this complexity and formlessness, the capacity of architecture is commonly located in the imposition of limits. Yet amidst an increasingly transdisciplinary field, and in an environment of uncertainty and change, the nature of architectural intervention and its sources of agency increasingly come into question.

Intended towards a generative critique of the relationship between architecture, the city, and its more-than-human subjects, this thesis explores the forms of agency found in urban conditions of interstitiality. Five unique territories are selected from across Metropolitan Vancouver—interstitial constellations commonly characterized by their ambiguous and contested relations between spatial jurisdiction and temporal occupation. Drawing on spatial indeterminacy and temporal flux as repositories of agency, a series of speculations respond to possible trajectories facing each site.

In *Displaced Reserve: Acoustic Crossing*, a constellation of communication devices are deployed at the Kitsilano Indian Reserve no. 6, a historically contested aboriginal village site in Vancouver. By collecting, focusing and transmitting sound, the acoustic mirrors engender provisional connections across the multiple jurisdictions currently occupying the territory.

In *Assemblage Agriculture: Interfaith Silo*, a series of shared parking towers are constructed in Richmond's 'Highway to Heaven,' located on the edge of protected agricultural land specially zoned for religious buildings. Responding to the uneasy coexistence of assembly

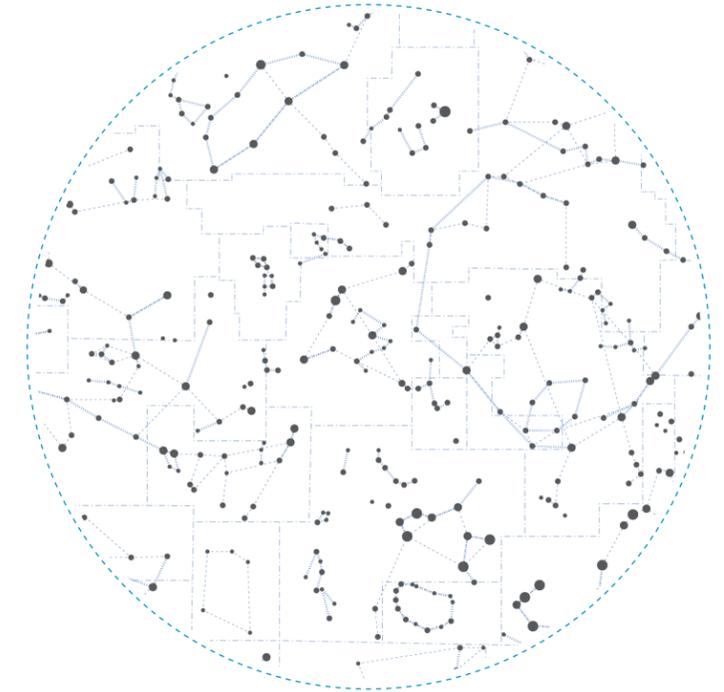
and agriculture, the new infrastructure allows both activities to expand beyond their conventional zoning boundaries.

In *Mutable Habitat: Commuter Cover*, a series of canopies are installed in Burnaby's (in)famous winter roosting site of northwestern crows. Deployed above street-front parking, the tensile constructions provide a series of civic amenities for both humans and crows, working around their respective daily and seasonal cycles of occupation.

In *Succession Infrastructure: Collective Clearing*, publicness and privacy become intertwined on the right-of-way of a natural gas pipeline in Surrey. Populated by a series of devices that facilitate spatial demarcation and communal gathering, the linear greenway becomes a mediating framework between personal and shared jurisdiction.

In *Unsettled Ground: Drifting Sanctuary*, a flexible apparatus of sensory perception and disaster protection is deployed on an intertidal zone known both for its shorebird ecology and its history of squatting. A series of floating shacks on the edge of the mudflats serve both as platforms for human observers, and as nodes in a system of wave attenuators and tidal booms.

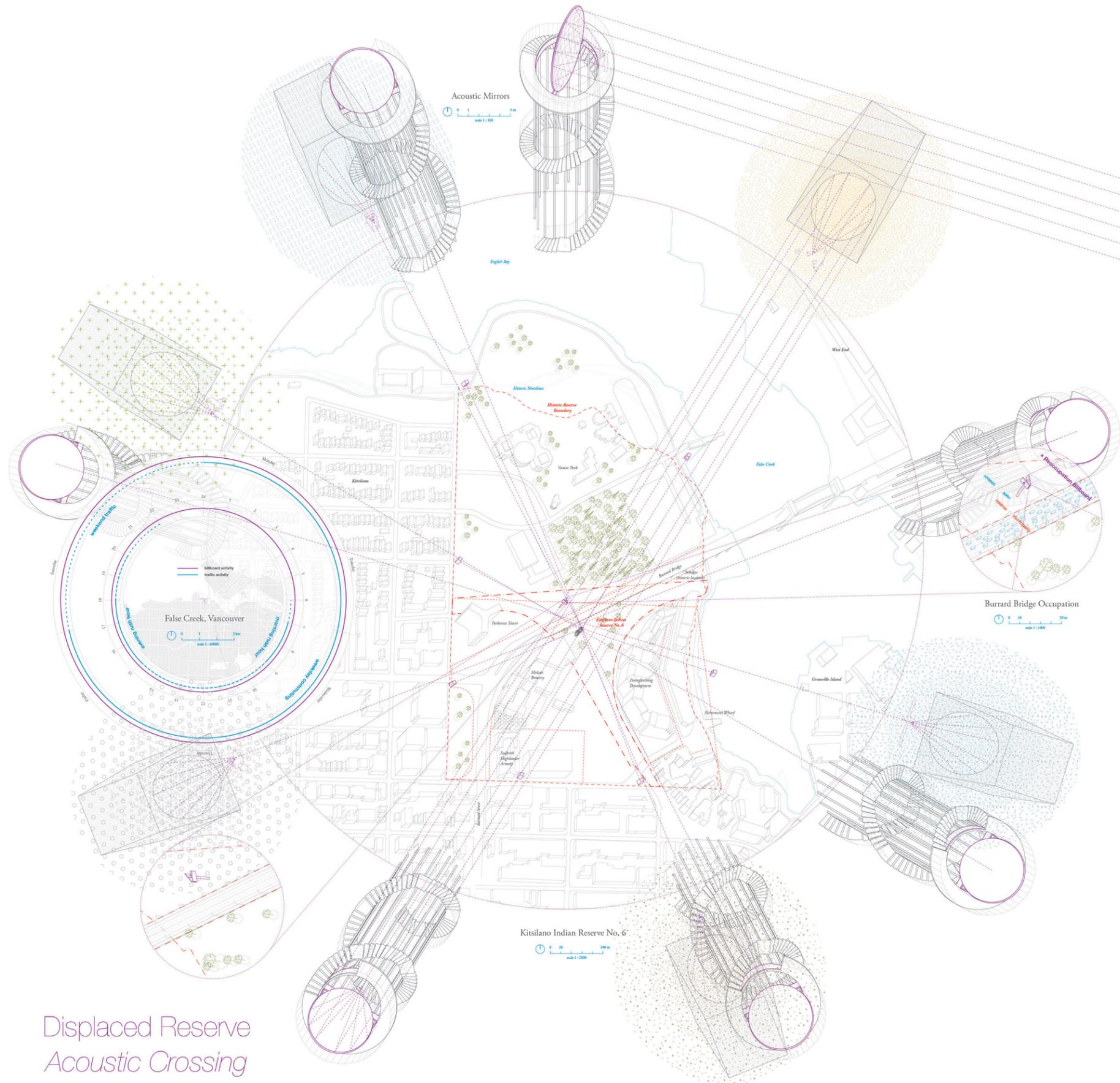
Positioned between realism and provocation, each intervention encompasses both a localized catalyst, and its system-wide effects on the landscape. Beyond transforming the territories onto which they are projected, these effects also become sources of agency for the very process of drawing.



In this process of speculation, constellation constitutes both the subject and the method. It offers multiple, seemingly unconnected viewpoints, and allows for an open-ended yet constructive mapping of relations. The five interstitial constellations reveal alternative vantage points on the city, and show that architecture may find new forms of agency by moving laterally with the currents of indeterminacy.

One-minute excerpt from the animation piece created for the project:

<https://youtu.be/8o5Rr1bxDY0>



Displaced Reserve  
Acoustic Crossing



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*Kitsilano Indian Reserve No. 6, Vancouver. A misshapen parcel, it is the former site of the ancient aboriginal village of Senákw, located within the unceded territory of three First Nations.*

*A vestige of an 80-acre reserve granted to the Squamish Nation in 1869, most of which was expropriated, subdivided and sold off over the course of the past century, the land also used to be an interurban streetcar crossing.*

*The current reserve, returned to the Squamish in 2002, is today simultaneously inside and outside the city: it is surrounded by municipal territory and traversed by a bridge, yet exempt from its jurisdiction.*

*Adjacent to the southbound lanes of the bridge, a pair of three-by-ten-metre digital billboards display advertisements in ten-second intervals.*

*Elevated from the ground, the billboards operate outside municipal signage bylaws, yet function through being viewed by traffic, and mark the re-occupation of the land by the Squamish.*

*They also signal the impending real-estate development of the reserve, independently of the municipal planning regime.*

*Across the bridge, directly opposite the billboards, another device is installed. A large acoustic mirror is supported by an elevated platform accessed through a spiral stair, and fitted with a rotating armature.*

*The mirror is the central hinge in a constellation of devices, which physically mark and acoustically connect points across the boundaries of the original reserve, locations that correspond to various parcels and jurisdictions occupying the land today.*

*Over the course of a week, the central mirror shifts between orienting toward specific positions to acoustically link with the other devices, and an incidental direction governed by chance.*

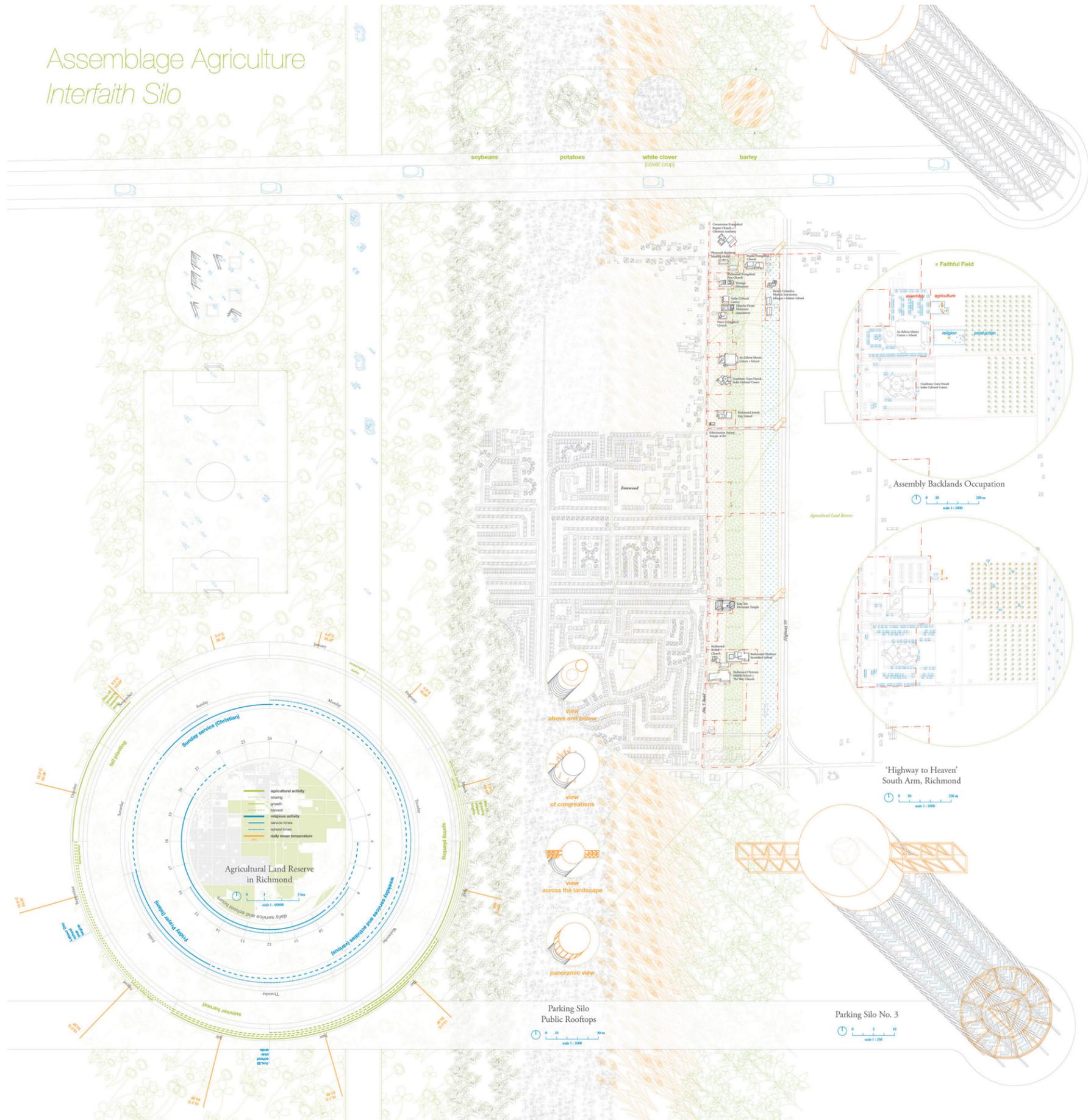
*Simultaneously, it becomes an ever-changing visual register for passers-by.*

*The peripheral mirrors, on the other hand, are monolithic and fixed in position, in turn becoming the acoustic registers of surrounding public activities.*

*Through their careful placement, the devices establish a series of protected acoustic corridors, oblique to the normative views of, and from, the surrounding city.*

*By collecting, focusing and transmitting sound between distant points, the mirrors engender provisional crossovers across jurisdictions, and across time.*

Assemblage Agriculture  
Interfaith Silo



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*Highway to Heaven, Richmond.* A three-kilometre stretch along the hard edge between urbanized territory and agricultural land, unexpectedly revealing iconic religious buildings which belong to every major religion.

Located on fertile lands at the Fraser River delta, over one-third of Richmond's territory constitutes farmland protected under British Columbia's Agricultural Land Reserve, established in 1973.

The cluster of churches and religious schools along Highway 99 are within a special zone created during the wave of immigration in the 1990s to provide assembly space for the new communities, while preserving agricultural land elsewhere.

The zoning requires each congregation to maintain agricultural activity on two-thirds of their parcel—a stipulation half-heartedly fulfilled, as evidenced by decorative gardens and playing fields in the backlands, halfway within and outside the code.

Caught between local food production and the ongoing immigration of diverse ethnicities, the continuing growth in the number and size of these religious buildings has resulted in conflicts over the loss of cultivated land.

The proposed expansion of certain congregation spaces at unexpected scales has been subject to public debate, one dominated by the top-down view of municipal zoning.

Grounded in existing productive relationships across jurisdictions, the activities on the landscape are reorganized to allow both assembly and agriculture to expand beyond their zoning boundaries.

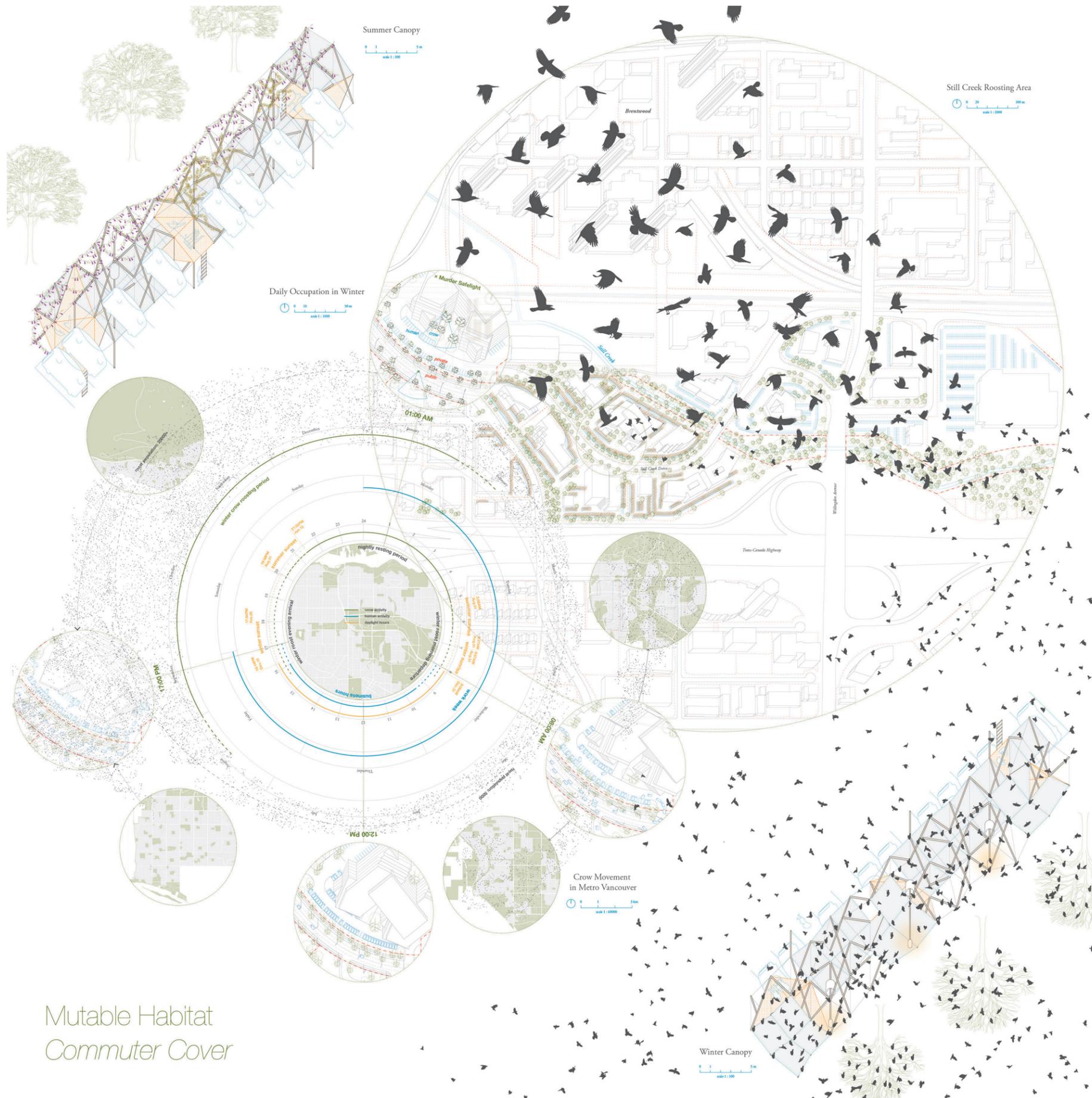
Surface parking, already regularly shared between neighbouring religious institutions that operate on different schedules, is consolidated into a series of vertical silos, which become fixed infrastructures for cyclical land use on the surrounding fields.

Built on undeveloped municipal street right-of-ways, the silos are distributed across the landscape and supply an optimal number of parking spaces. From its rooftop, each tower offers a unique view of the landscape below.

Spanning across parcels, three bands of crops are rotated seasonally and annually on the land, forming an ever-changing scenery that envelopes the buildings.

A fourth band of fallow land, planted with a cover crop, becomes the site for an assemblage of playing fields, gardens and gathering spaces, and serves as a connecting path across the communities.

Operating the combined scale of the congregations, this landscape of productive change provides a new flexibility for their growth and coexistence.



Mutable Habitat  
Commuter Cover



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*Still Creek Drive, Burnaby. A vestigial forest around a natural creek, surrounded by business parks, big box stores, condominium towers, and home to British Columbia's largest winter roost of northwestern crows.*

*Ever since in the early 70s, Metro Vancouver's crows spend winter nights in the area. While some of them live in the roost year-round, their number expands from late August to early March, with over 20,000 birds in December.*

*Over this period, in a daily choreography of presence and absence, the crows spread throughout the city at dawn to find food, and return only shortly before nightfall, commuting 30-45 minutes both ways.*

*Simultaneously, the office workers in the vicinity follow a reverse pattern, so that the arrival and departure of human and crow commuters—one governed by business hours, the other by daylight hours—nearly coincides during the winter.*

*Seeking out the city's heat and nightly illumination, the crows occupy power lines and street trees, located proximate to artificial light sources.*

*While they skilfully adapt to the human alterations of the landscape, their presence remains a precarious one, received by tolerance at best, and by animosity at worst.*

*The attempts to deter them from flocking and excreting onto rooftops and parking cars, are oblivious not only to their intelligence and sophisticated social life, but also to the fact that their urban ecology is dependent on and mirrors our own.*

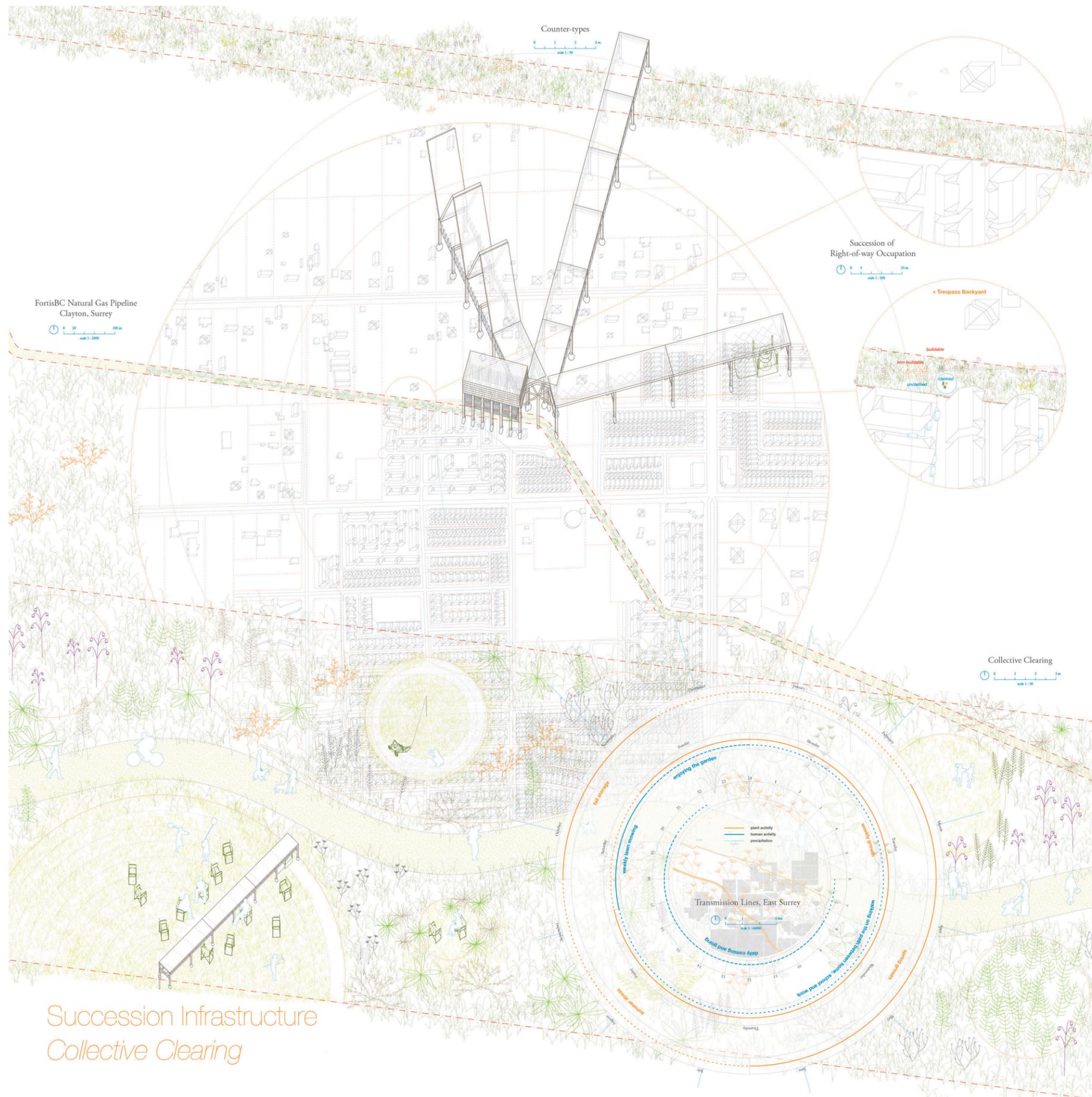
*Responding to respective daily and seasonal cycles of occupation by crows and humans, a new topography is deployed to enhance their disparate and mutual presences.*

*Constructed over the parking lots enveloping the office buildings, a series of lightweight canopies, planted with flowering climbers, mimic the conditions provided by street trees.*

*Over the winter, the variegated structure provides crow-friendly perching spaces. A translucent membrane diffuses light from nearby sources, and also shelters the vehicles below from crow droppings.*

*From early spring to late summer, the various vines growing on the canopies bloom at various times, filling the air with their heavy fragrance and newly attracting new visitors, who begin to flock to the elevated human nests on evenings and weekends.*

*Be it to enjoy the smell of flowers in the summer, or to observe the social life of crows in the winter, the canopy network catalyzes an enhanced choreography of co-habitation.*



Succession Infrastructure  
Collective Clearing



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**East Clayton, Surrey.** A recently built townhouse subdivision backs onto of a corridor overgrown with tall grasses and wildflowers, except for a small clearing with a pair of camping chairs set out.

Concealing a natural gas transmission line, the corridor constitutes an eighteen-metre right-of-way and non-buildable zone, which diagonally cuts through private property.

Crisscrossing the expanding suburban fabric, in defiance of both the arterial grid and the cul-de-sac, such right-of-ways allow for the existence of provisional ecologies, disturbed only by periodic mow-downs by the utility company.

Far from indigenous, these fallow, overgrown third landscapes emerge along with urbanization, through the same process that produces the tiny, manicured lawns of the adjacent densely built townhouses.

Plans to integrate this space into a growing network of normative and low-maintenance municipal greenways only serve to raise concerns about the loss of individual privacy, amidst a simultaneous depletion of an unseen hybridity.

Traversed by makeshift paths and occupied itinerantly, the relentlessly planned corridor paradoxically shelters an uncertainty of natural succession, and harbours a vaguely defined public intimacy.

Through a series of provisional demarcations, this unnatural yet unplanned landscape becomes the ever-changing framework for a mosaic of occupations, a site of publicness and privacy intertwined.

Along its length, the corridor's ecology is allowed to continue in its state of mutation, absorbing diversity by chance.

It forms a linear repository of habitat, and a gentle buffer between the public path and the private residences, at times extending beyond the right-of-way boundary into the adjacent gardens.

Amidst this carpet of natural succession, each subdivision property is equipped with a collapsible, pivoting structure, which demarcates a permanently shared lawn and serves as gardening storage, lawnmower armature, and communal counter.

Along the path, a series of temporary clearings are also created annually, to satisfy the individual tastes and desires of residents, while also catalyzing the adjacent ecology with their productive disruptions.

On the public path, the communal counters and the individual clearings, an ongoing negotiation of trespassing takes place between plant ecology, local residents and passers-by.



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## Interstitial Territories

Metropolitan Vancouver  
 0 10 20 30 km  
 scale 1:100,000

- urbanized area
- aboriginal reserves
- agricultural land
- natural area
- transmission infrastructure
- water body

**Maplewood Mudflats, North Vancouver.** An intertidal zone and marshland habitat, wedged between industrial grounds and suburban houses and facing an oil refinery across Burrard Inlet. Subject to the region's semidiurnal mixed tidal movements, the area moves back and forth between water and land, forming a constantly shifting landscape of tidal bars, levees, ponds and channels. Covered in rocks, oysters, mussels and other creatures, this subtle micro-topography is only interrupted by the occasional driftwood, and by lines of wooden pylons of various height. Some of the pylons, used to mark anchoring points or the boundaries of navigable depth, today support small nest boxes for endangered birds. Rich in habitat, the tidal flats are frequented by hundreds of different migratory species throughout the year. Less known is the fact that the liminal ground, today off-limits even to birdwatcher enthusiasts, had also been home to a different ecology of transience: squatters' shacks, informal sculptures, alternatives lifestyles. Paradoxically, it was the squatters' presence and violent eviction from the intertidal zone, portrayed by the authorities as a clearing of an obstacle to urban development, that contributed to its eventual designation as a conservation area. This precarious landscape of inevitable change becomes the site for a flexible apparatus for sensory perception and selective preservation. Threatened by sea level rise, waves from motorboat traffic, and an increased risk of spillage from oil pipelines and tankers, the outer edge of the mudflats is enclosed with a system of wave attenuators and tidal booms. The floaters rise and fall with the tide, contributing to the protection of the shoreline from erosion, while allowing currents and organisms to freely move back and forth below them. Above the water line, they form a new surface of occupation for shorebirds. A series of fixed nodes anchor the flotation network to the seabed, and support shelter spaces for human observers, offering new vantage points from the middle of the inlet for the duration of a single tidal cycle. During low tide, each hideout platform is accessed from the shore through a linear walkway, which become submerged during high waters. Through their placement, the walkway understructures mitigate erosion, and serve as artificial grounds for intertidal organisms. Mediating between risk and possibility, the enclosure of booms and shacks drifts towards an uncertain future, amidst an ever-changing choreography of seasonal, lunar, and daily rhythms.