INSIGHTS FROM OUR DESIGN JAM

ON RESILIENT AND CONNECTED HOUSING

EVENT ORGANIZERS

SFU RENEWABLE CITIES

HEY NEIGHBOUR! Collective

Happy Cities

EVENT SUPPORTERS

Thank you to Pacific Institute for Climate Solutions (PICS) for contributing to this event. Max Bell Foundation, Sitka Foundation and North Family Foundation also supported this event.

SFU Action on Climate Team (ACT) assisted with resource creation and catering costs.

Thanks to Jennifer Cutbill for her opening presentation.

On November 14, 2024, **40 professionals** with expertise in **housing, climate, nature-based solutions and building design** joined us to explore ways to integrate social connection and climate resilience into site designs.

We assembled **small interdisciplinary groups** to work on a retrofit or new build site with specific site parameters (and an unlimited budget to encourage blue sky thinking!). Each group had 45 minutes to ideate and incorporate their ideas for incorporating **nature-based solutions** and **social connections into a multi-unit residential building site design**.

THEMES: KEY OPPORTUNITIES FOR ADDRESSING CLIMATE AND SOCIAL CONNECTION

- **Nature-based solutions** such as green roofs, bioswales and rainwater solutions are crucial for **improving climate resilience**
- **Shared amenities** are a key opportunity for residential buildings to enhance climate resilience and social connectedness, including designing for multi-functionality
- Considering and connecting features at the **site or neighbourhood scale** can support more efficient and effective use of community resources (e.g., shared green space, rainwater management, community gardens)
- Adoption of innovative solutions is hindered by outdated, **risk-averse regulations**, which are often designed for the lowest common denominator rather than encouraging better or more innovative approaches
- Integration of **cultural safety**, **lived experiences**, **intergenerational connections** and **community building** is needed in housing redesign

NEXT STEPS: KEY QUESTIONS, NEEDS AND GROUPS REQUIRED TO MOVE FORWARD

During the plenary discussion, a few key questions emerged as we consider the path forward:

- How can we **catalyze policies** that promote integration of social connectedness and climate resilience into the design of multi-unit residential buildings?
- How can we **broaden the impacts** of these design opportunities from site-scale to neighbourhood-scale?
- To scale these ideas, how do we **evaluate or quantify** the benefits of these solutions?
- How can we **shift our approach to prioritize** the benefits of nature-based solutions and social connectedness for mitigating the impacts of weather events such as heat waves and floods?
- How do we **fund** this? Especially the revitalization of older buildings?
- Which solutions can be implemented on a short timeline? Which could be **piloted as a case study**?

OTHER NEEDS

- **Clearly defining roles** for all stakeholders (e.g., building owners, operators, community groups, insurance companies)
- **Cross-sectoral** partnerships to scale this work
- **Reframing risk** to encourage innovation in regulations, enabling more flexible design outcomes and options
- **Building a narrative** about why B.C. is uniquely positioned for collaboration in these areas

Key groups to invite to the next conversation include elected officials, insurance agencies, engineers, legal professionals to unpack challenges around property agreements and liability, funders, more public health officials or experts and more building owners and operators (some were present at this session).

There was also a call to work directly with community residents and Indigenous communities who can inform design and planning approaches. Hosting a similar session for elected officials could increase political buy-in.

SNAPSHOTS OF GROUP DESIGNS

TABLE 1

Townhouse complex retrofit

Key features: repurposing the pool into a **bioswale**, redeveloping existing townhouses to a **community amenity and commercial space**, creating a community space in the middle of the complex with a playground, and creating community resiliency through **communal gathering areas** and **green spaces**

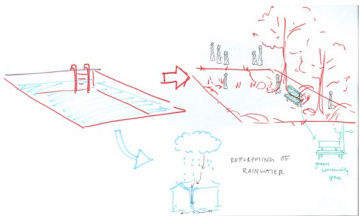
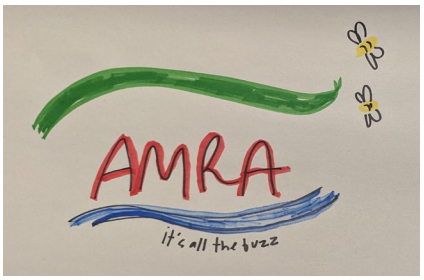
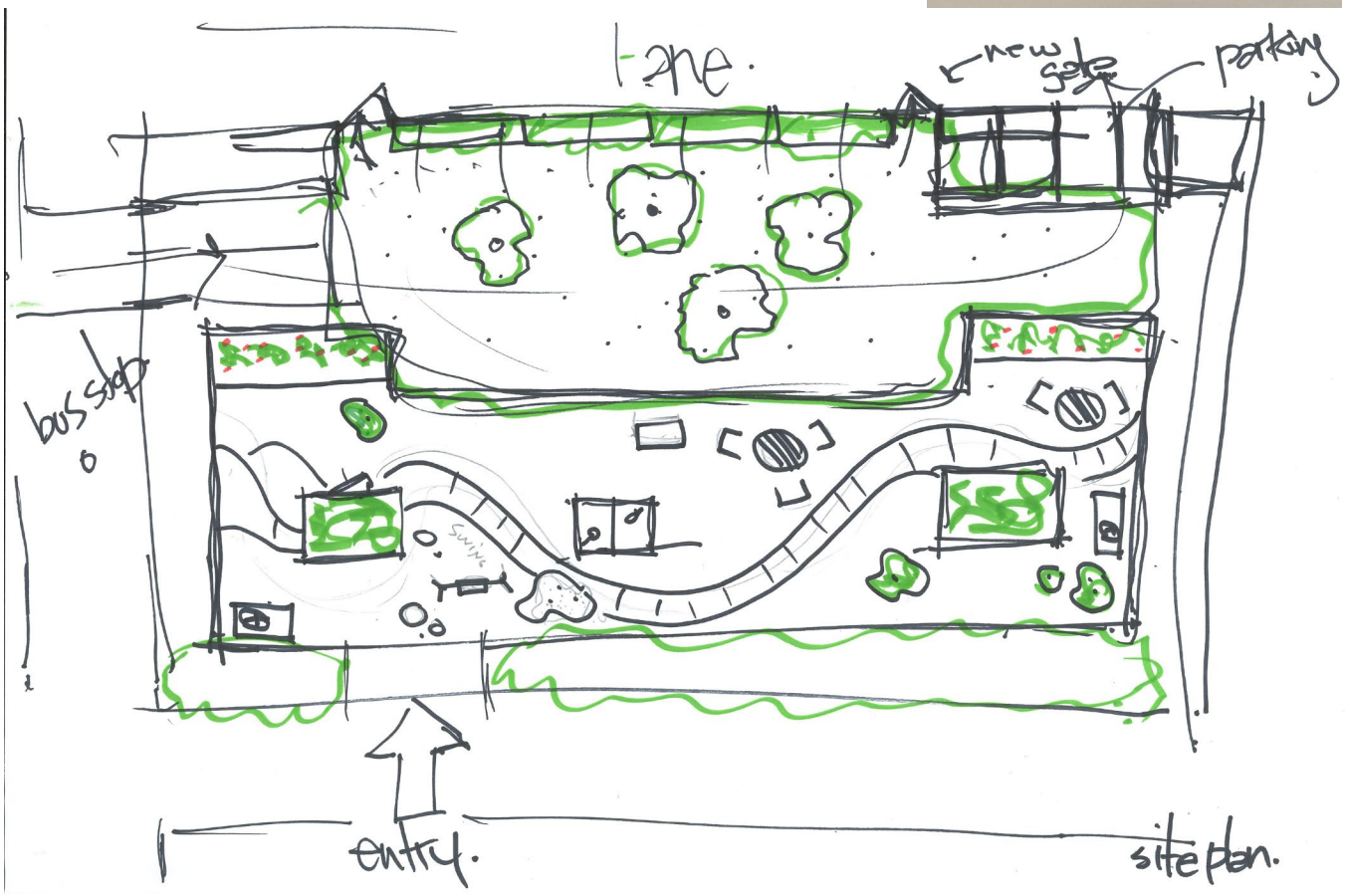


TABLE 2

Low-rise walk-up apartment retrofit





Key features: reclaiming covered parking spaces into **outdoor amenities** (e.g., patio space), **energy upgrade** on the roof, **green space** replacing asphalt for cooling, creating clubs for kids, potlucks and **integrated intergenerational communities**, creating spaces where residents feel safe and supported

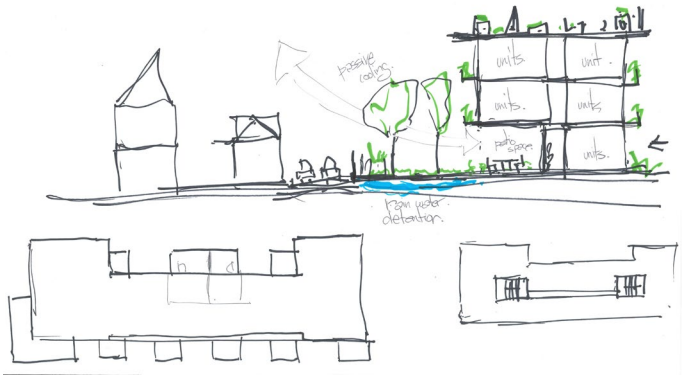
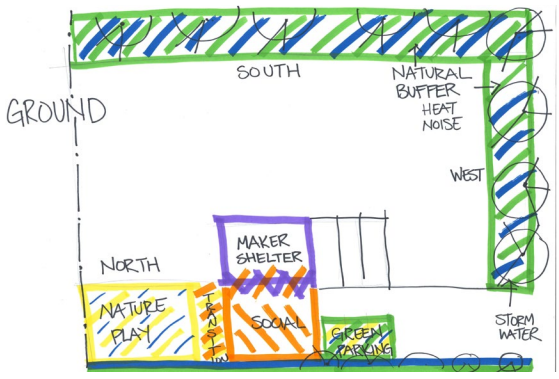


TABLE 3

Low-rise walk-up apartment retrofit

Key features: tall trees to manage extreme heat, nature play space, green parking, **flexible indoor/outdoor amenity spaces** (e.g., transforming parking spaces into outdoor space for picnics/ BBQs), **nature buffer** to decrease road noise and manage stormwater



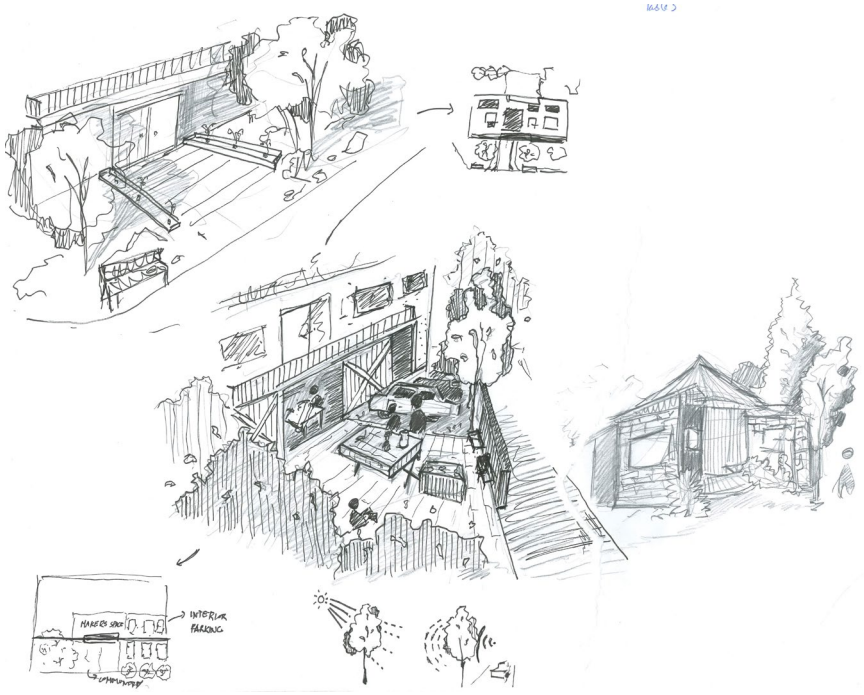


TABLE 4

Twenty-storey tower retrofit

Key features: turning pool into **bioswale**, **permeable pavers** for accessibility, playground, adding more **Indigenous plants**, fruit trees, transform tennis court into **multi-sport space**, lending library, indoor/outdoor amenity space shaded in the summer, bike storage at grade

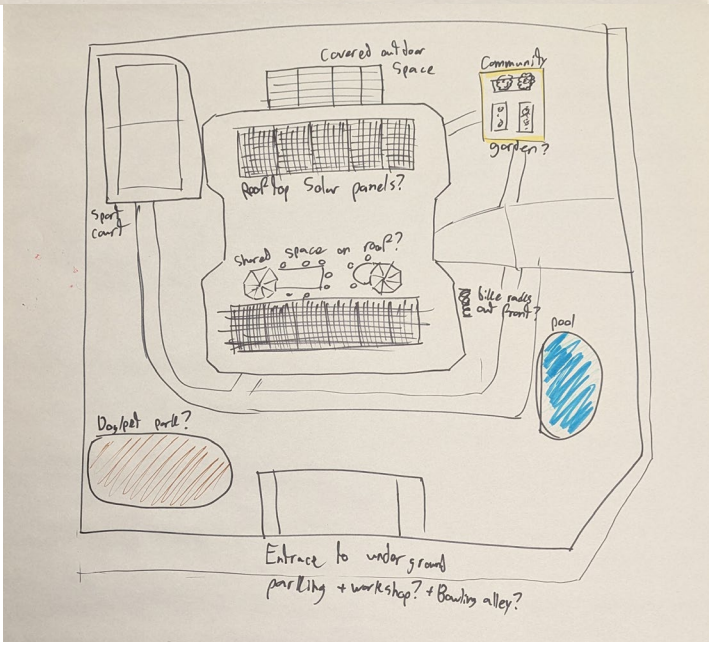


TABLE 5

New build on city-owned suburban land assembly

Key features: take advantage of city ownership and thinking about **diversity of tenants** and possible unit sizes, south-facing amenity space, **net zero**, climate and food **efficiency** through **aquaponics**, green roof for native been habitat, **zero discharge** site for water, **single loaded corridor** with exterior circulation, **passive cooling** with deciduous climbing plants

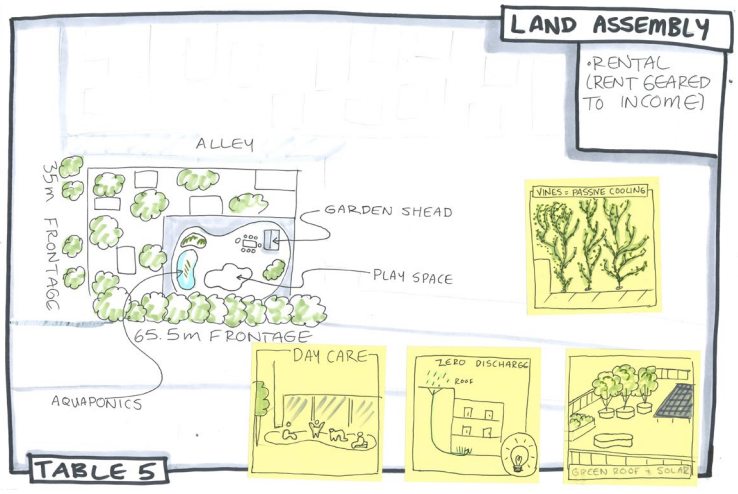


TABLE 6

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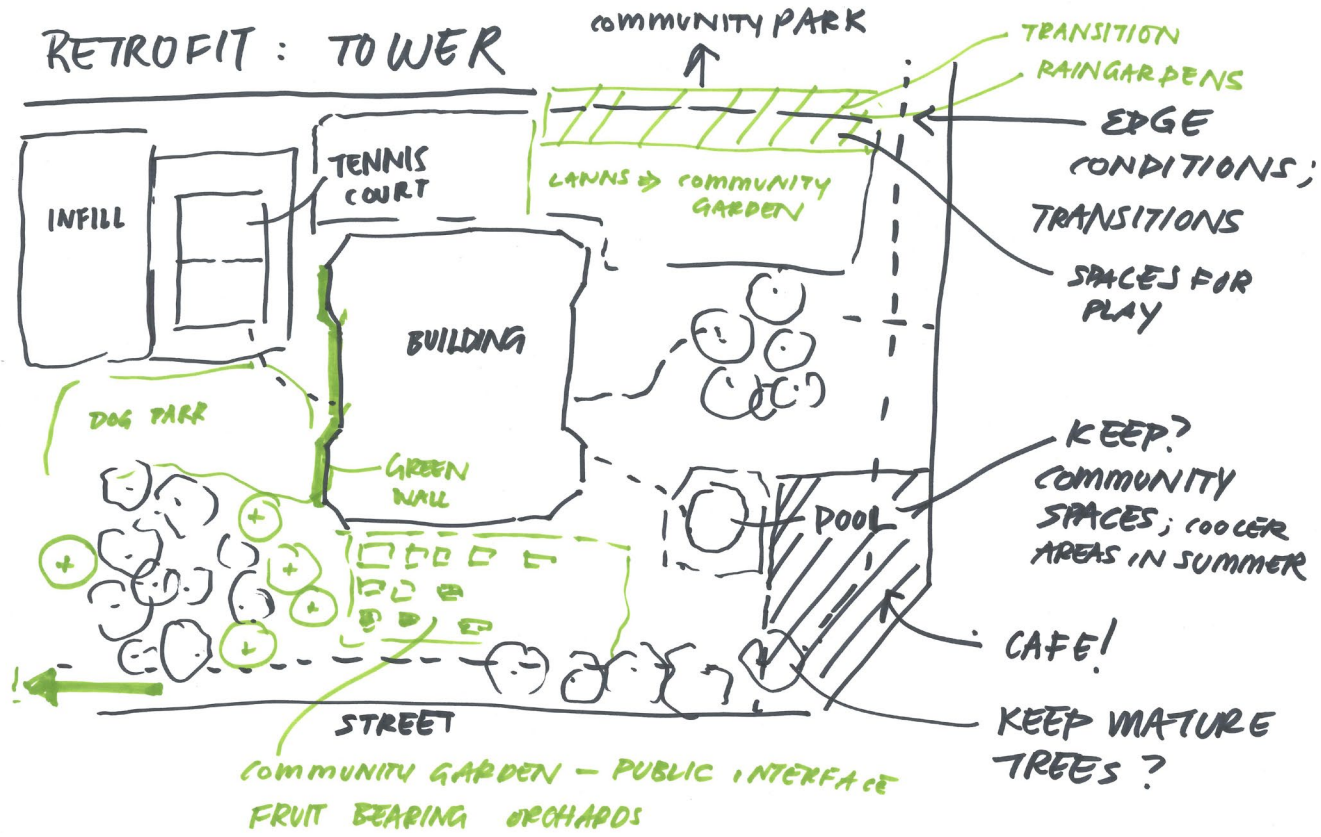
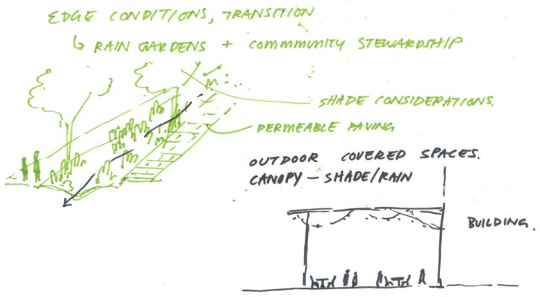
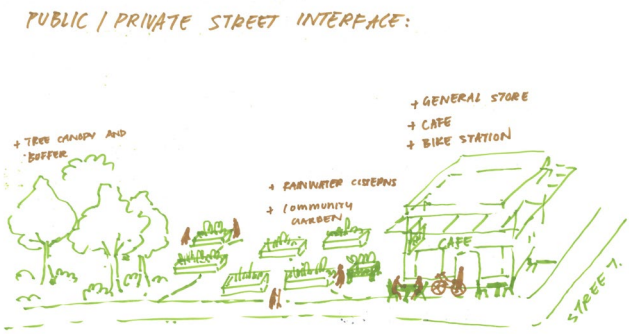
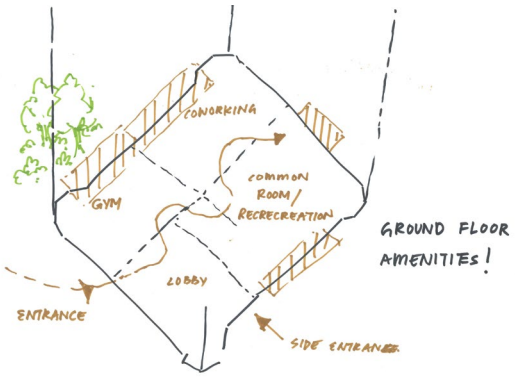


Key features: adding a **cafe** on the grounds to serve the neighbourhood with a **green roof** (stewardship opportunity), **amenity room** above the cafe to offer cooling spaces, bike care stations, rain gardens, dog park







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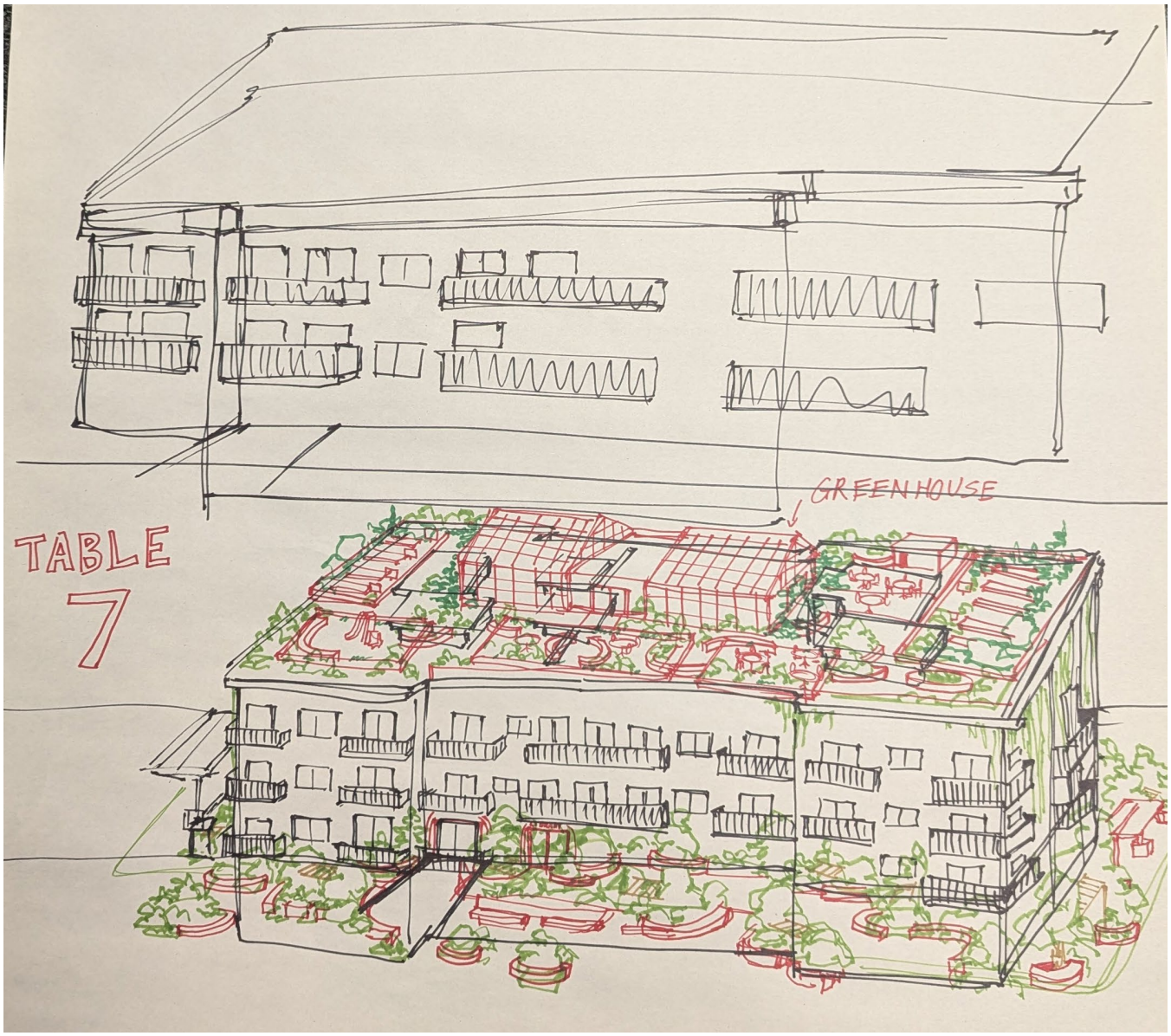
Low-rise walk-up apartment retrofit



Key features: communal **rooftop** upgrade with **greenhouse**, active gardening; external **third-party partnerships** to ensure gardening among tenants continues, updating entrance to offer natural light, orchard, outdoor play area for kids, sharing library (seeds, objects, books), entryway to spill out into the street with **elements that force people to slow down**

MORE MULTI-SOLVING CONVENINGS COMING IN 2025

STAY CONNECTED

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