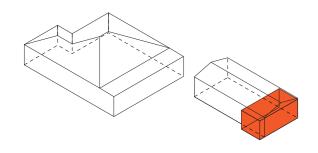
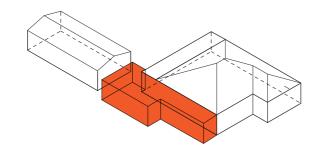


**Social kitchen** for interaction and gathering

**Household diversity** for multiple uses and dwellings within one building



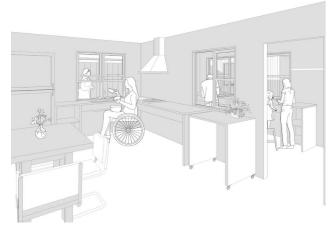


Bathroom with a window to maximise light, air and prospect

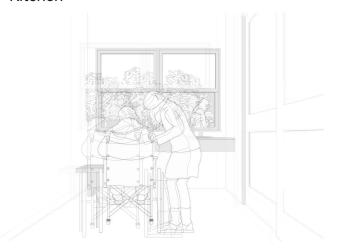
Active outside area for gathering and a range of uses



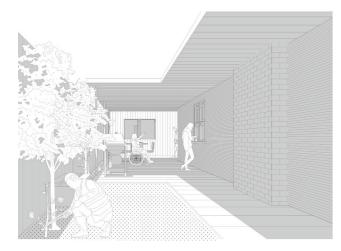
Single, double and triple frontage detached houses on generous blocks have deep setbacks from the street with stepped front entries. Typically, they have a detached one-car garage at the rear accessed via a driveway that runs down the side of the house, with a shed at the back. They were developed in the suburbs of Melbourne in the 1950/60s in response to the quickly growing population and the desirability of the suburbs as a place to live. Original internal layouts have a stepped, narrow entry with a central hallway, bedrooms on one side, and living/dining rooms, a kitchen, one bathroom and a separate toilet on the other side. The house presents challenges for accessible adaptation including raised ground floor levels, narrow corridors and doorways, as well as small toilets and bathrooms that have showers above bath hobs or with raised bases. The material assembly of the houses, such as timber construction, lightweight cladding and timber subfloors, make alterations relatively feasible. The width of the house and the block provides opportunities for a variety of refiguration, including the activation of the side garden. The freestanding garage provides opportunities for accessible conversion and housing diversity. Despite their potential for retrofitting, detached houses are at risk of demolition due to the size of the block that attracts dual occupancy developments.



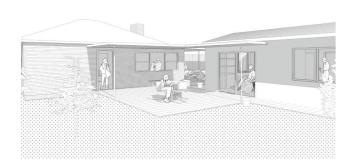
Kitchen



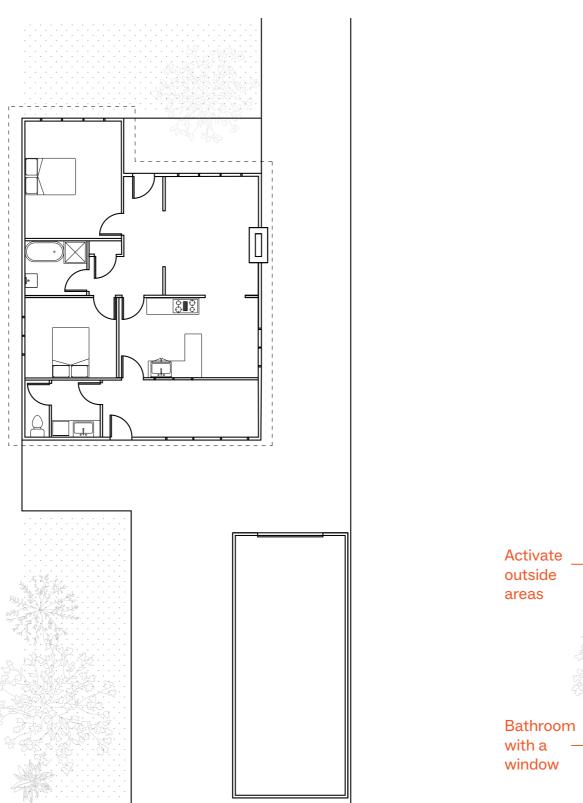
Bathroom

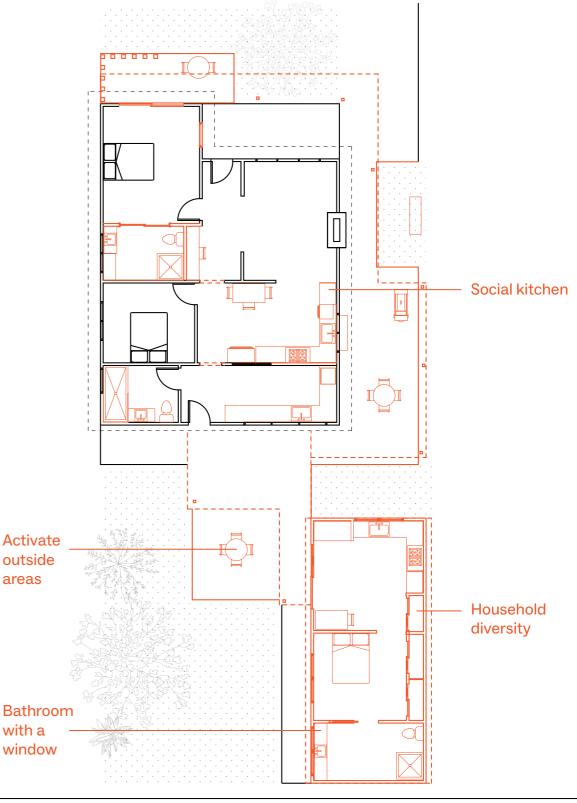


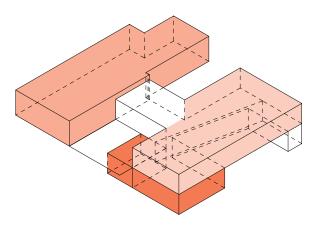
Deck



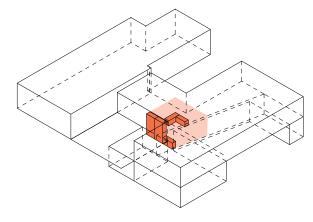
Garden



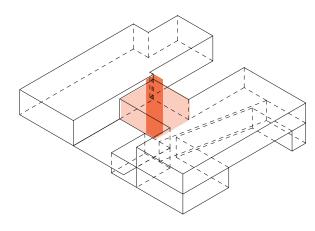




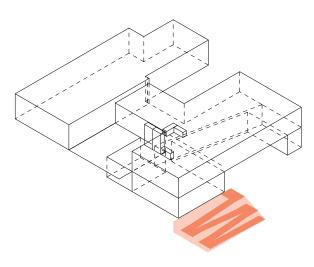
**Household diversity** for multiple uses and dwellings within one building



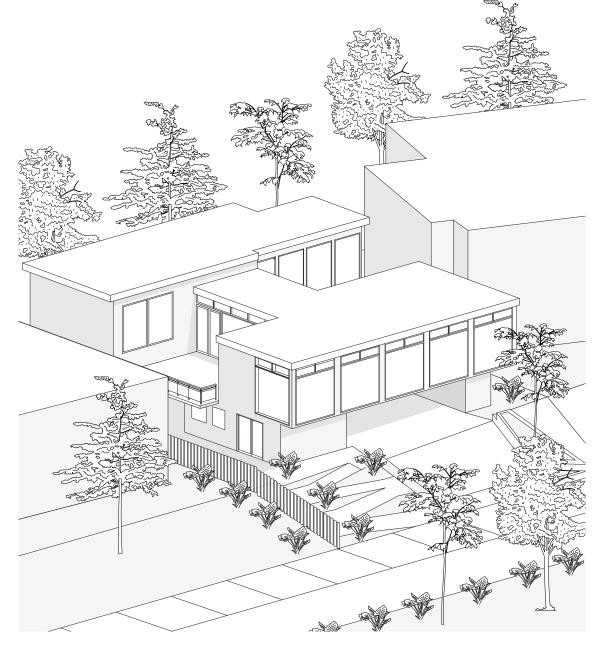
**Mudroom** at entry for pausing and preparing for arrival or departure



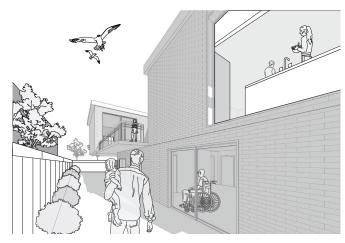
**Dual key entry** and buffer zone for separate occupants



Landscape levelling
For seamless movement and access



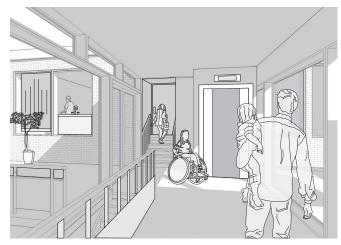
The large detached house is distinguished from its smaller version by its scale and formal diversity. Houses are sited on big blocks of land, with front and back gardens and off-street parking, and are one or two storeys with attached double garages. Common features include staggered facades, large windows made of wood or steel, high ceilings and timber floors, hipped and cantilever roofs, and stud frames with exterior walls clad in weatherboard, brick veneer or cement sheet. This building type includes architect-designed homes that were built as part of the 1950/60s wave of modernism, featuring light-filled flowing spaces, open-plan living areas and good prospect, as well as project homes scattered across the city. Challenges for accessible adaptation include lack of level access with buildings often sited on steep blocks to maximise views, raised and split floor levels in the two-storey arrangements and bathroom configurations. However, the scale and general amenity of these dwellings is a significant asset for inclusive and diverse occupation. The large of size of the house offers subdivision opportunities for cohousing, multi-generational families, working at home, or discrete areas for carers and renters. The double garage offers a generous envelope for conversion and sizeable blocks makes these houses ideally suited for additional dwellings.



Side Yard



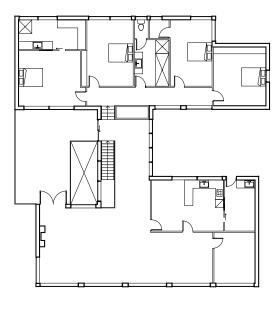
Mudroom



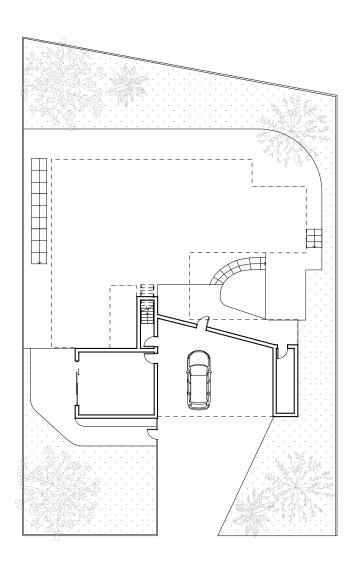
**Buffer Zone** 



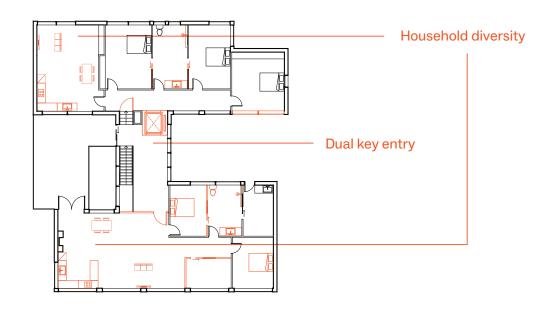
Front Yard



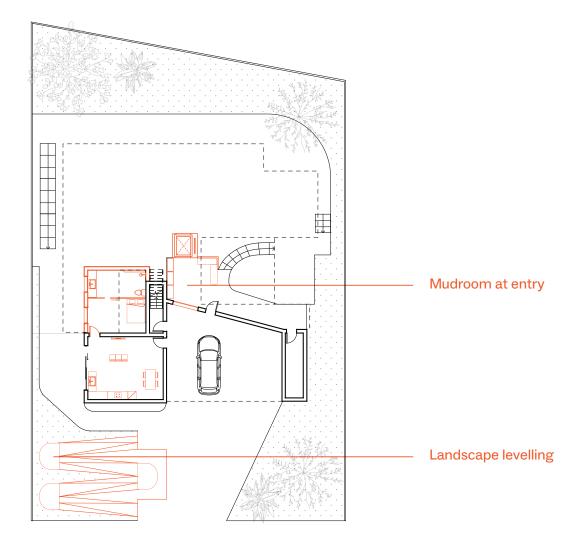
Renovation First Floor Plan 1:300



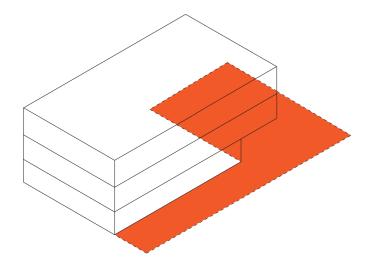
Renovation Ground Floor Plan 1:300

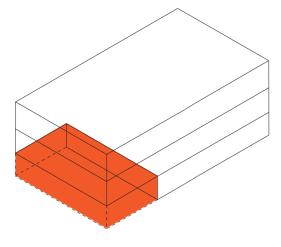


Renovation First Floor Plan 1:300



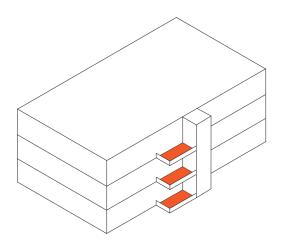
Renovation Ground Floor Plan 1:300

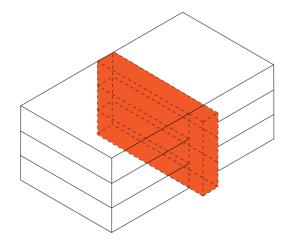




**Drop off and pick up zone** with protected and practical access by vehicles

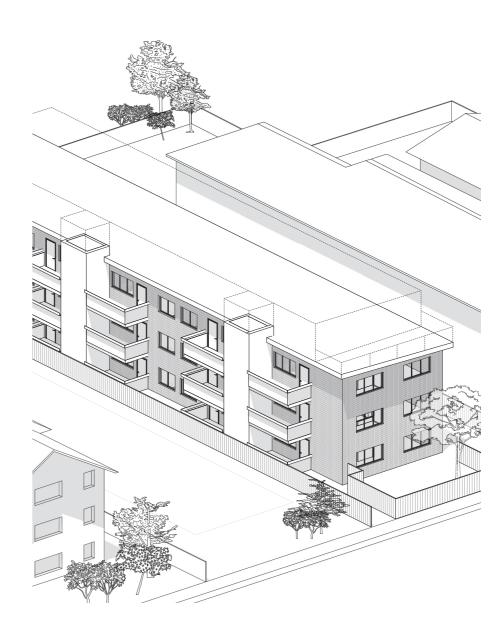
Social spaces to encourage interaction between residents



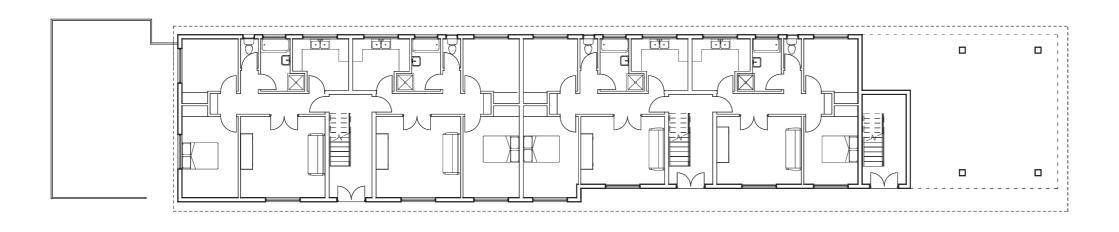


**Lift with private balcony** for added amenity

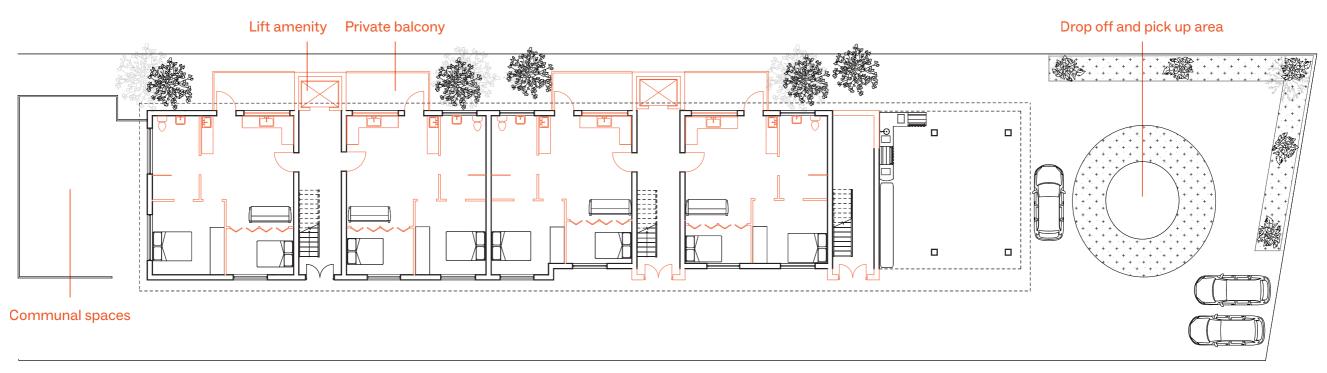
Lift amenity to enable access and potential for extra floor level to increase tenancy and capital value



Walk-up flats are multi-storey masonry apartment buildings that were dubbed as the "six pack", accommodating a minimum of six, two-bedroom dwellings. Served by a parallel driveway with parking at the side and rear, the block's shorter façade typically faces the street, consistent with the scale of the existing Victorian building frontages. Walk-up flats have a long, rectilinear plan, single flat or hip roof form, and a variation of internal or external circulation. As a new infill type, they proliferated in suburbs in the 1960s and 70s, replacing large Victorian houses. Depending on their plot and siting, walk-up flats can suffer from poor orientation and a lack of privacy. Their multiple storeys with no lift, internal layouts and compact scale are a significant challenge for accessibility. Despite these challenges walk-up flats offer multiple opportunities for an accessible retrofit. The rectilinear form allows for the integration of a lift to the external envelope. Their square plan and general amenity in terms of light and air enable efficient and high quality rearrangement. The shared driveway provides a generous and safe drop off and pick up area. As one of the most common apartment types in Australian cities with relative typological conformity, walk-up flats provide an ideal model for at-scale adaptation. There is renewed interest in this apartment type as a model for low-rise, multi-dwelling density.



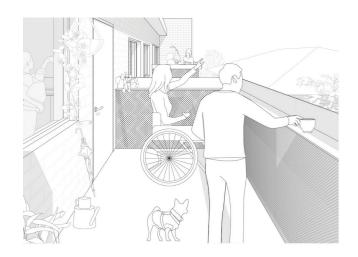
## Existing Ground Floor Plan 1: 200

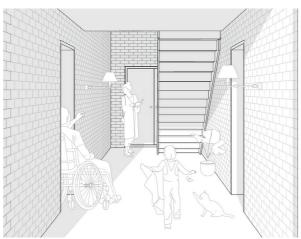


## Retrofitted ground floor plan

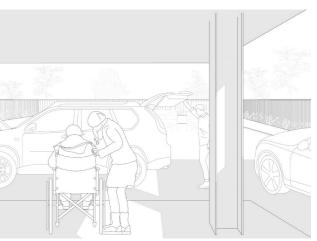
1:200

Balcony





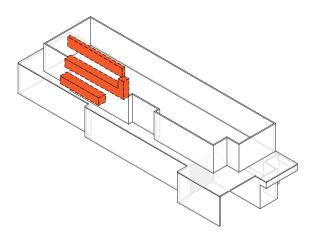




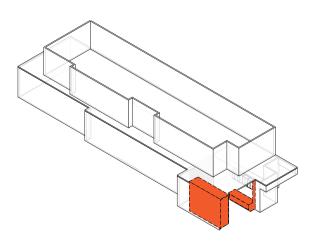
Communal Corridor

Social Communal Space

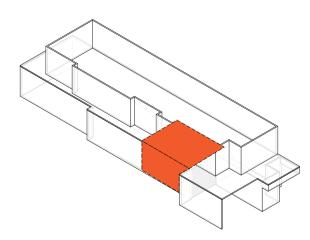
Drop Off/ Pick Up



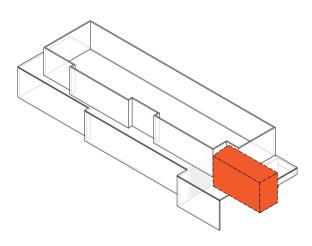
**Ergonomic kitchen** with adjustable bench heights and safe appliances



**Garage conversion** for multi-purpose room



**Complete ground floor** includes bedroom, bathroom and living room at the ground level



**Mudroom** at entry for pausing and preparing for arrival or departure

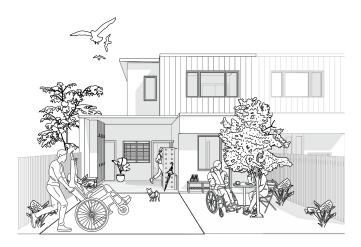


Townhouses are sets of dwellings with at least one attached wall on subdivided blocks and include a variety of types such as double-storey and semi-detached houses. They are narrow and long with private outdoor spaces at the front and back. Some have double access with a rear lane and garage, but commonly the garage is at the front next to a porch/portico that forms part of the entry. Two or three bedrooms are generally on the upper level with a living and powder room on the ground floor, and larger types include a bedroom and bathroom on the ground floor. Echoing Victorian terraces, townhouses were developed from the 1980s as a compact, infill house type that addressed the need for affordable, higher density housing that accommodated the growing population in established suburbs. Upper level living and bedrooms, narrow corridors and compact bathrooms are the key challenges for accessible conversions. The long linear arrangement with shared party walls further limits options for spatial reconfiguration. However, level access from the garage to the street in this house type is a key advantage for retrofitting the ground floor as an independent accessible dwelling, which, when coupled with dual entries, enables private and flexible occupation by a diversity of users. The linear plan allows for open-plan combined living and kitchen conceived as a social area.

RetroFit Kit 1980s Townhouse RetroFit Kit



Kitchen



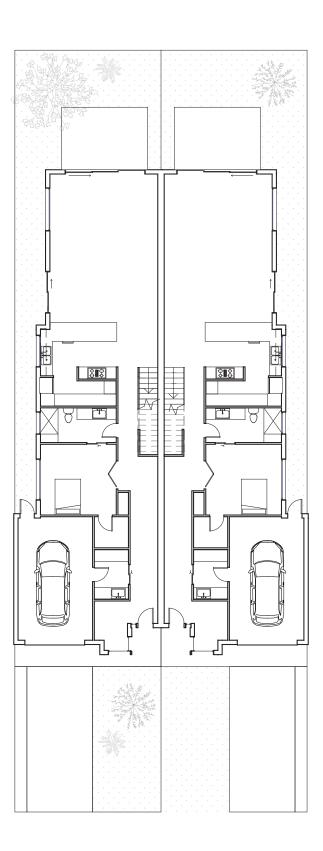
Garage



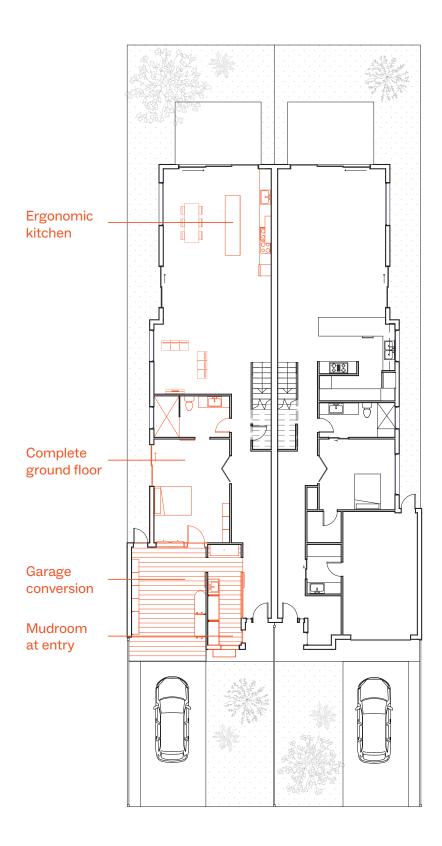
Bedroom



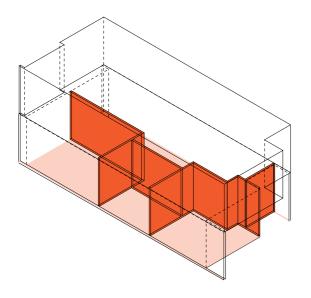
Mudroom



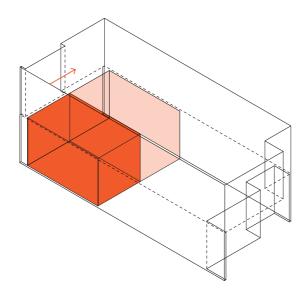
Existing Ground Floor Plan 1:200



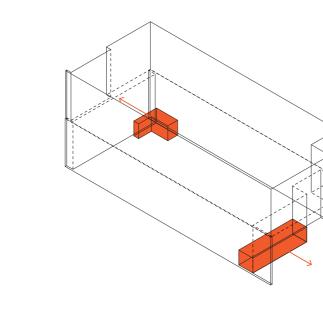
Renovation Ground Floor Plan 1:200



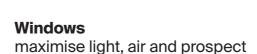
Complete ground floor includes bedroom, bathroom and living room at the ground level



Half garage conversion allows room for multi-purpose area



**Social kitchen** for interaction and gathering

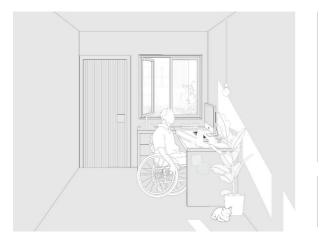




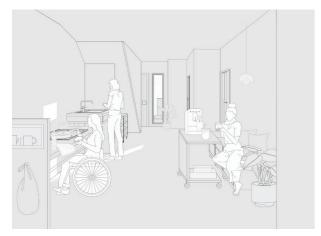
The row house is a contemporary townhouse with a compact footprint. It appears from the street as a row of attached dwellings with shared common walls or separate built-to-boundary walls. They are up to three storeys in height, with 2-3 bedrooms, a ground level entry from the street, a courtyard and rear lane access. Living areas are generally upstairs, often with a balcony. Garages are either attached to the dwelling at the front or back, or are separate structures at the rear of the property. The row house has become part of the housing mix in recently developed outer suburbs and infill 'brownfields' in response to policies for higher density development that provides housing diversity and makes efficient use of land and infrastructure. Their compactness makes them an affordable housing option appealing to a broad demographic. Row houses share the limitation of townhouses including long linear arrangements, upper level living and bedrooms, narrow corridors and inaccessible bathrooms. However, they share the advantages of the townhouse model, with a distinguishing feature that they more commonly have rear access lanes that enable dual entry for more than one occupant. Given that these houses are currently being built on the city periphery, design-led retrofit principles can be applied to new builds.



Front Yard



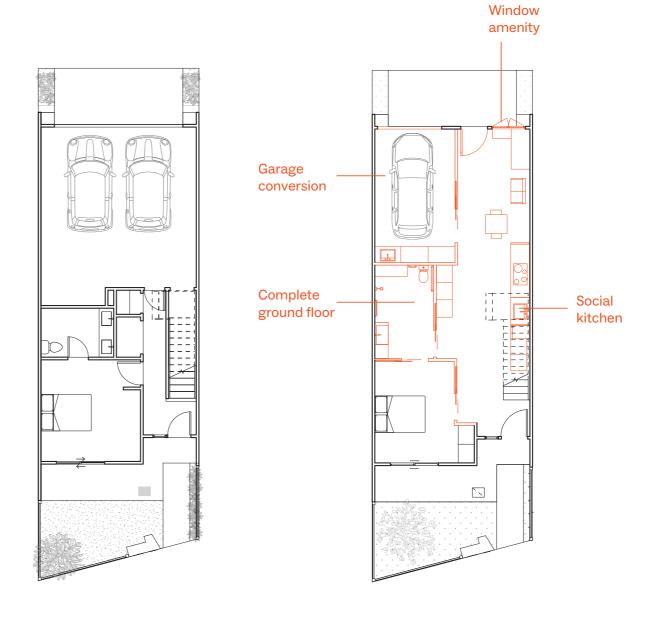
Study window



Kitchen

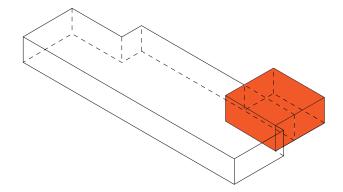


Garage

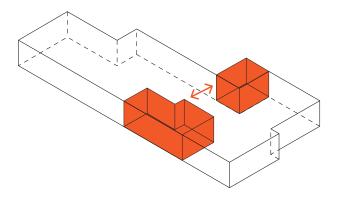


Existing Ground Floor Plan 1:100

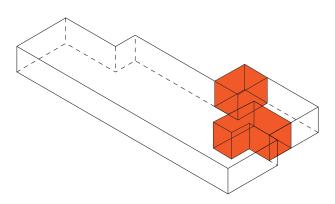
Retrofitted ground floor plan 1:100



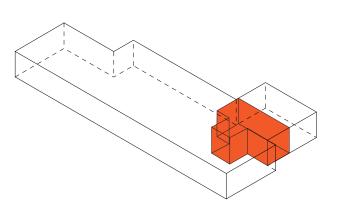
Garage conversion for multi-purpose room



**Social kitchen** for interaction and gathering



Integrated ramp, pathways and landscape for easy access



Front entry and buffer zone for separate occupants

One or two storey garage houses are volume-built, project homes where the standard-size, double car garage dominates the house frontage. Single or double fronted, the house is set back around 6 metres from the street, with direct hard surface driveway access. These 3-4 bedroom homes are commonly brick veneer with aluminium framed windows and tiled roofs. The layout includes a stepped entry that leads to a hallway with the garage on one side and a 'formal' living or master bedroom on the other side. Living/kitchen/dining rooms are often arranged as an open plan area and there is a dedicated laundry. Two-storey models have separated living areas and bedroom zones. Developed from the 2000s as the dominant housing type in 'greenfields' on the edge of the city, all homes have a prominent garage that is both a symbolic and practical reference to the domination of the car as the principal mode of transport. Despite being a reasonably contemporary housing type, they are not compliant with accessibility standards and suffer from the same challenges as older housing types, such as stepped circulation and compact bathrooms. While the houses have a flexible timber frame, internal load bearing walls and brick veneer facades make adaptations difficult. Their advantages include the standard 6 x 6 metre garage that can be converted for multiple uses, flat and smooth accessible driveways, and block sizes that allow for additions such as dual entries to serve more than one occupant.

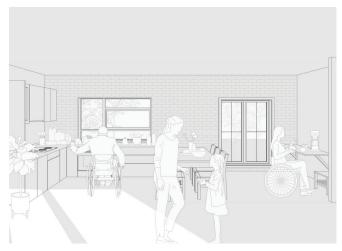
RetroFit Kit

2000s Garage House

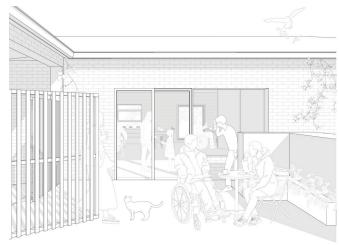
RetroFit Kit



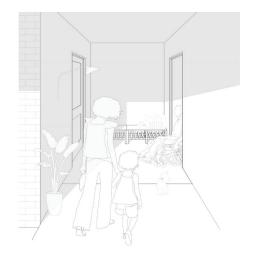
## Garage



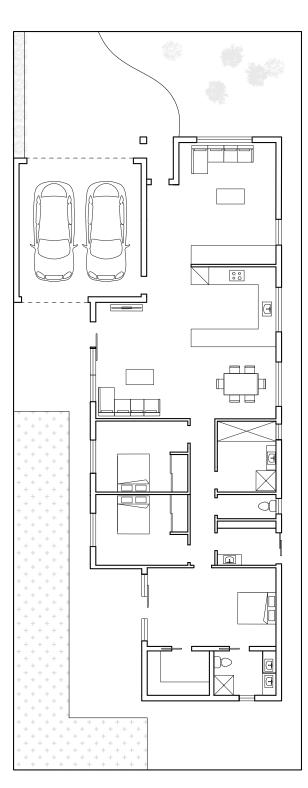
Kitchen



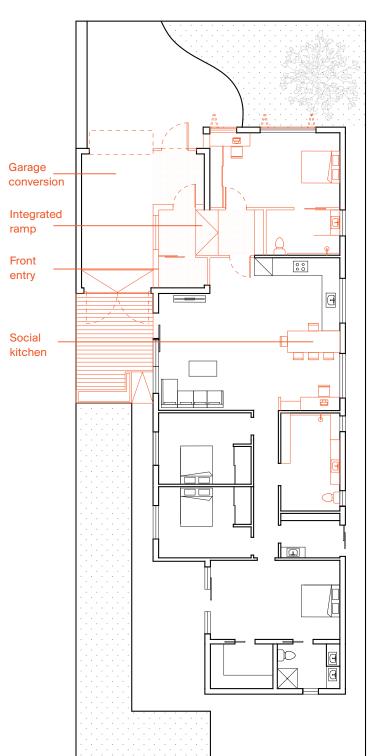
Side Deck



Entry



Existing Ground Floor Plan 1:200



Retrofitted ground floor plan 1:200