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Innovating Liveable and Affordable Higher Density housing through design and planning: the case of 67 Bennett Street, Perth WA.

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### **Abstract**

Innovating liveability and affordability through medium and higher density housing and precinct developments is critical in ensuring the sustainable quality of living while maximising returns on investment for all the stakeholders involved, including buyers and developers. In this context, the liveability framework, focused on housing as an integrative good (Rosenfield 2015), is seen as a critical tool supporting a holistic approach to decision making and investment in housing enabling the co-creation of value in a sustainable way.

This paper discusses the findings of the case study undertaken at 67 Bennett Street, Perth, Western Australia, as part of the SBEnrc research project on developing a liveability framework for social and affordable higher density housing.

The three key areas investigated as part of this research focus on:

1. an understanding of government's role in driving industry structure;
2. built form, urban design, and the creation of social and economic value; and
3. innovative urban forms via liveable design outcomes that respond to the whole of life need with the aim of minimising future and present risks to our community.

Twelve in-depth interviews with key stakeholders from the housing industry and government were conducted over the course of 2021, and the information sourced was used to inform the liveability framework for social and affordable medium to high-density housing against five key components:

- 1) Liveability – place-based and community-focused,
- 2) Accessibility – person-centred and community-focused,
- 3) Value equation – cost-benefit,
- 4) Regulatory and policy environment and
- 5) Adoption and overcoming barriers.

An analysis of the precinct, including the planning and building design scheme and building types, was then performed against the components of the liveability framework to holistically assess the intervention as an integrated set of decisions.

### **Keywords**

Design, Liveability, Planning, Sustainability, Social Housing.



## 1 Introduction

Provision of liveable<sup>1</sup> and accessible medium-to high-density housing<sup>2</sup> is a critical component of a successful housing strategy aimed at maximising returns on investments while minimising future risks to urban communities, such as physical and mental wellbeing, health, safety, security, societal integration, etc. This paper draws from the research used to develop a liveability framework for medium to high-density social and affordable housing, in which we argue that the resultant liveability framework can be used to develop project and precinct-based, value focussed standards and targets to drive adoption of better outcomes while promoting community acceptance of delivering whole-life-solutions. This is addressed through an investigation of three key areas focused on:

- 1) Regulatory context – Building an understanding of government's role in shaping industry structure and driving new urban forms for higher density urban precincts around next level liveable housing outcomes and liveability issues was deemed essential. Government's role is considered especially with regards to regulation and pathways for adoption, including overcoming barriers that may prevent uptake of liveable design features in homes and urban precincts, as well as an awareness of tax/funding model<sup>3</sup> as a means of additionally supporting low-income groups.
- 2) Value generation – Built form, and urban design were investigated through the lens of liveability and accessibility to capture the creation of social and economic benefits to the broader community, including whole of life costing. Nine domains identified in Project 1.31 (community and culture, economy, education, environment, employment, health and wellbeing, social engagement and urban amenity) inform this area and identify social, cultural and economic value of housing.
- 3) Adoption of 'Beyond minimum standard' approach – Improved adoption of liveable design to better ensure universal access that goes beyond the implementation of minimum housing standards for liveable design (e.g. corridor widths, hob-less showers, door widths to avoid retrofit, potential noise and visual stimuli) for specific cohorts was considered, along with a 'what next' approach premised on the need for enhanced access in housing and urban areas across many stages of a person's life (e.g. disability, aging, child rearing). This also includes other key issues such as how to drive adoption; and how to demonstrate value and benefits.

This approach informed the selection of the five main components of the liveability framework:

- 1) Liveability – place-based and community focused,
- 2) Accessibility – person centred and community focused,
- 3) Value equation – cost benefit,
- 4) Regulatory and policy environment,
- 5) Adoption and overcoming barriers.

## 2 Literature Review

Urban precincts providing medium- and high-density housing are blurring the lines between the public and private realms. Conventions, legislations, regulations, policy and guidelines around accessibility and liveability differ across these two realms but need to be reassessed in the context of higher density living to ensure equitable access through the home and precinct. The trend towards renting rather than home ownership in Australia as the dominant housing option also require of us to reassess issues around liveability and accessibility. The regulatory framework in WA is currently subject to a comprehensive review, which the Minister of Planning initiated in 2017.

The reform is focussed on three key topics - design standards, planning instruments, and consultation processes with particular regard to early community engagement and includes a revision of 'Planning and

<sup>1</sup> This term is inclusive of universal housing design and additional urban based liveable design feature to be detailed in the *Liveable Social and Affordable Higher Density Housing* framework currently under development.

<sup>3</sup> P1.54 Funding and Financing Report and P1.61 network maps and analysis can inform this.



Development Act 2005, Planning and Development (Local Planning Scheme) Regulations 2015 and State planning policies to create a more flexible, responsive and contemporary planning system that can support Western Australia's economic recovery. This is the culmination of more than three years of consultation across all sectors and the community to deliver high quality and sustainable development, create new employment and business opportunities, and ensure people have their say early about future development in their communities. Under the existing system, the focus continually falls on individual projects, rather than on the scheme or planning framework under which these projects are delivered. The aim of these reforms is to ensure the planning framework – including the scheme – has been developed in consultation with the community and is guided by a local planning strategy to develop liveable and attractive precincts (Government of Western Australia 2020).

The three main objectives of the WA Planning reform stem from the values of sustainable liveability and prosperity outlined in the document 'Our Priorities: Shared Prosperity'. Its goals include an increased housing choice to satisfy different needs of population and more diverse households, high amenity and safety to increase liveable and healthy communities, efficient use of infrastructure to reduce cost of new housing and cost of living, increased connectivity and protection of agricultural land and other valuable ecosystems (DPLH 2019, 6).

Building on the report *Better Places, Better Spaces*, a policy for the Built Environment in Western Australia, the State Planning Policy SPP 7.0 Design of the Built Environment has developed the basis for a set of residential and non-residential codes focussing on achieving Good Design outcomes (OGA 2013). The SPP 7.0 explicitly defines good design as a set measurable outcomes.

The second principle underpinning good design is the consultative process, whereby the role of design experts is pivotal to success of good quality outcomes. One of the examples is the UK CABE, where policy starts from the assumption that good design outcomes can be achieved when a competent and skilled architect or building designer is engaged for the design in a consultative planning process, the design review. The design review is an independent and impartial evaluation process based on the ten principles of good design<sup>4</sup> regulated via the Planning and Development Regulations 2015 or the WAPC Design Review Guide. During the review, a panel of experts on the built environment assesses the design of a proposal, before the proposal is officially submitted for approval to the statutory authority (DPLH and WAPC 2019). The panel's feedback is then incorporated into the final version of the project to achieve the quality necessary for the approval.

The R-Codes state policy is a mainly technical document, the purpose of which is to enable control of residential development design processes and outcomes in Western Australia. State Planning Policy 3.1 Residential Design Codes is prepared under section 26 of the Planning and Development Act 2005 and focuses on Residential Design codes, which regulate the approval for single house, single houses on small lots and developments designs (Sections 1-3) (DPLH 2019a).

The document includes consultation procedures (Section 4), and the possibility for local council to demand, with the approval of the WAPC and fundamental design principles, quality outcomes with which every proposal needs to comply. Design principles relate to site, building, garage and lot boundary setback, building height, open and communal space, street surveillance and sight lines. They also regulate outdoor living areas, landscaping, access and parking and apply in a different manner according to density. Density is defined by the Residential code (R-Code), that is the Number of Dwelling per hectare, where: R40 = 40 dwellings per Hectare. The R-codes are currently applied as a default setting to provisions defined in local planning instruments. Part 5 refers to dwelling areas less than R40, Part 6 refers to R40 and above. The R40 threshold seems therefore to constitute a reference for a distinction between low density and higher density from the statutory body's perspective.

The density thresholds seem to be confirmed by the Standard Policy 7.3, released on February 2019, which relates to grouped dwellings in areas coded less than R40, while for areas above R40 an innovative policy has

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<sup>4</sup> The 10 principles of good design focus on: context and character, landscape quality, sustainability, functionality and build quality, community, amenity, legibility, built form and scale, and safety and aesthetics.



been released in mid-2019 (SPP7.3 Vol. 2). The SPP7.3 Vol 1 replaces SPP3.1. The document details standard guide areas selection for lower to higher density residential developments. It suggests that R80 seems to constitute a further threshold towards high-density, as all standards for dwellings rated R100-R160 follow consistent standards. This document, released in conjunction with the SPP7.3 Vol. 1, applies to R-codes deemed R40 and above and complements the set of compliance rules established by the SPP7.3 Volume 1 through a performance based rather than prescriptive based approach (DPLH and WAPC 2019b). Under this provision, high-density is defined as R100 and above to a max of R160, with plot ratio between 1.3 and 2.0. Mid-rise is between R60 and R80 with plot ratio between 0.8 and 1.0. The R-AC codes apply where designated by local governments in local planning schemes, activity centre plans, structure plans, and local developments. Under these regulations the following space types are defined:

- 1) Active habitable space – any habitable room with a floor area greater than 10m<sup>2</sup> and any balcony, veranda, terrace, or other outdoor living area raised more than 0.5m above natural ground level.
- 2) Activity centre - community focal points. They include activities such as commercial, retail, higher density housing, entertainment, tourism, civic/ community, higher education, and medical services. Activity centres vary in size and diversity and are designed to be well-serviced by public transport.
- 3) Activity centre plan - An activity centre structure plan is a statutory document required by State Planning Policy 4.2 for strategic metropolitan centres, secondary centres, district, and specialised centres but not for neighbourhood or local centres (State Planning Policy 4.2 Table 2: Activity Centre Hierarchy). It can be prepared by local government, a landowner, landowner's representative, or a government agency.

The quality performance indicators for achieving good design outcomes in housing, in response to the ten principles of good design, are addressed through several elements and objectives. For each element, key objectives and acceptable outcomes are identified to orient and facilitate residential design. They offer a comprehensive list of criteria to consider and address when designing higher density apartments.

### 3 Research Methodology

The research method adopted for the selected case study, 67 Bennett Street, Perth WA, is based on the analysis of the physical contexts of building's architecture and surrounding urban domain including the regulatory framework in order to test the applicability of the liveability framework. To this end, the following steps were undertaken during the research:

- 1) Identification of diverse and comprehensive stakeholders group covering all the aspects of delivery stages of social housing
- 2) The review of literature assisted refining the framework and defining the site selection criteria
- 3) Case study investigation:
  - a. Data collection, site visits, and graphic documentation and of the selected examples
  - b. Typological and spatial analysis of buildings' architecture and the two precincts.
  - c. Policy and guideline alignment- national and state.
  - d. Stakeholder interviews.

More specifically, concerning 3.b, semi-formal stakeholder interviews were undertaken with representatives from several network groups. These interviews helped to:

- (i) test and develop the draft framework; and
- (ii) identify the strengths, weaknesses, opportunities, and threats/gaps in the existing precinct.

Due to project resources the number of interviews was limited to 12-15. The intent being to describe the current situation in order to inform framework development, rather than to establish replicable results.

The selection of the interviewees was based on ensuring coverage of the network groupings and elements identified in previous SBEnrc research by Kratz and Jayawardena (2020). Interviewees were identified and then cross-referenced between the 2 groups to determine the final selection.

#### **Table 1 – Ensuring breadth of coverage across the network for the framework**



<b>Impact Domains</b>	<b>Network Elements</b>	<b>Network Participant Groupings</b>
<b>D1</b> Community & Culture	<b>E1</b> Policy drivers and players (Curtin, FH, Dep of Communities)	<b>G1</b> Person/Family (Foundation Housing (FH))
<b>D2</b> Economy	<b>E2</b> Funding (CEDA, FH, Dep of Communities)	<b>G2</b> Gov. housing policy agency (Dept. of Communities WA (Housing))
<b>D3</b> Education	<b>E3</b> Financing (CEDA, Dep of Communities)	<b>G3</b> Commonwealth Gov.
<b>D4</b> Employment	<b>E4</b> Procurement and delivery (Dep. of Communities, BGC, FH)	<b>G4</b> State Government (Dept. of Communities WA (Housing))
<b>D5</b> Environment	<b>E5</b> Metrics, indicators and data (CEDA, Dep of Communities)	<b>G5</b> Local Government (City of Perth)
<b>D6</b> Health & Wellbeing	<b>E6</b> Labour market dynamics and housing (CEDA)	<b>G6</b> Peak body /industry associations (Committee for Economic Development of Australia (CEDA))
<b>D7</b> Housing	<b>E7</b> Changing demographics Curtin, FH, Dep of Communities)	<b>G7</b> Advocates (Foundation Housing (FH), Committee for Economic Development of Australia (CEDA))
<b>D8</b> Social Engagement	<b>E8</b> Housing typologies (JCY Architects, FH, Dep of Communities)	<b>G8</b> Community Housing Providers (Foundation Housing (FH))
<b>D9</b> Urban Amenity	<b>E9</b> Socio/environmental systems (Curtin, FH, Dep of Communities)	<b>G9</b> Not-for-profit providers (Foundation Housing (FH))
	<b>E10</b> Integrated, shared & disruptive tech. (BGC, JCY Architects)	<b>G10</b> Research (Curtin)
	<b>E11</b> Housing asset management (Dep of Communities, FH)	<b>G11</b> Industry (BGC / JCY Architects)
	<b>E12</b> Production supply chain (BGC, Dep of Communities, Hassell, JCY Architects)	<b>G12</b> Philanthropic
	<b>E13</b> Skills, knowledge and capacity building (All)	<b>G13</b> Informal

Summary notes were prepared by the research team following each interview which were then provided back to each interviewee for confirmation. Key findings from each of the interviews were extracted by the research team and allocated into themes (i.e. framework components and sub-components).

#### 4 Findings and Discussion

##### Case Study: 67 Bennett Street, Perth

East Perth identity, strongly associated with its industrial past (power station, gasworks, and railway yards) beginning around the First World War, has in the last 20 years changed and developed towards a residential city fringe. The housing typology is mainly medium to high density. The lower density dwellings, designed with a village-style approach, wrap around the water in the northern area of Claisebrook Cove. The higher density apartments are located closer to the Perth CBD. The property market is mainly rental, with the area attracting mostly young couples. As demonstrated in the analysis of the Bennett Street precinct, while East Perth is close to Perth CBD, facilities able to attract various household types are lacking, especially public schools and community facilities. This has, in turn, facilitated the rental market over the owner-occupied tenure type.

In 2019, before the pandemic, the rental sector was the fastest growing sector in the Australian housing system, with an increase of almost 20 percent between 2011–2016 (Hulse et al., 2019). This private rental market can mostly be associated with "small scale investor-landlords attracted by prospects of capital gain in an era of escalating house prices and seeking a safer investment to help provide for their retirement and to assist their children" (Gurran et al. 2021, 20). According to Gurran et al. (2020), centrally located housing provides higher accessibility and connectivity to greater opportunities for employment, and affordable rental accommodation, which are vital for low-income earners. However, while there is an availability of rental





property in the area, the lack of affordability is evident in East Perth. Over the past five years, the house prices in East Perth have remained above average when compared to the Perth metropolitan area.

#### *Building features and neighbourhood amenities*

The 67 Bennett Street development became operational in 2016 and delivers 70 affordable one bed and studio apartment dwellings within the inner-city Perth for people on low-income and eligible applicants who work in the city centre. The apartment block was designed by JCY Architects, the delivery was managed by NS Projects, with Jaxon Construction appointed as the builder. Foundation Housing, the not-for-profit community housing organisation, financed the project with a contribution from the former WA Housing Authority.

Before the redevelopment, the site on which the 67 Bennett Street project sits was the location of an old 12 room lodging house owned by Foundation Housing. This building was demolished to enable a joint venture between Foundation Housing and the WA Department of Communities (Housing) to deliver an affordable housing complex following the foyer model. As such, the location, accessibility, and liveability of the larger precinct are of significant concern as are the building amenities and supporting facilities within the East Perth precinct.

The development forms part of the City of Perth Precinct Plan No. 14, Goderich Precinct Plan which identified one of the five potential inner-city "distinctive residential communities" (CoP 2017a, 3) developments as suggested by the Perth Inner City Housing Taskforce in their 1992 report. The first version of this document was released in 2001 with regular amendments added over the years. The latest version of the precinct plan No. 14 was issued in 2017. The document encourages the identified areas to be classified as residential (medium to high density) to preserve their character. Amenities are identified as essential components in facilitating the establishment of a thriving and stable residential community and are envisioned further opportunities to deliver more community facilities while supporting interventions related to "environmental and traffic management as well as townscape improvement" (CoP2017a, 3).

The Goderich Design Policy (Planning Policy Manual - Section 6.3) accompanies the Precinct Plan. This policy provides direction and a design guide for the implementation of the Precinct Plan. The objectives of this policy are:

- *Establish a diverse residential environment where a high standard of amenity is provided, where historical themes are built upon, and where a variety and sense of urban richness will be evident.*
- *Promote a variety of housing types to accommodate a socially and culturally diverse community.*
- *Establish an identifiable retail and community focus for residents, employees and visitors in the Town Centre on Hay Street.*
- *Encourage a mix of uses in which commercial opportunities are provided, for people from both within and outside the area, while maintaining an overall residential theme. As part of this mix home offices should be actively promoted within the policy area.*
- *Strengthen the legibility of the public domain and provide friendly, active and people orientated streets.*

(CoP2017b, 3)

In relation to the built form, the design guidelines provide direction on building mass control aiming to achieve the land use and objectives for the area. Specifically, they encourage streets defined with a continuous edge and support the streetscape and public space design facilitating pedestrian use.

Concerning the Bennett Street, this development is classified as a Category A street with no prescribed height limit and defined as follows:

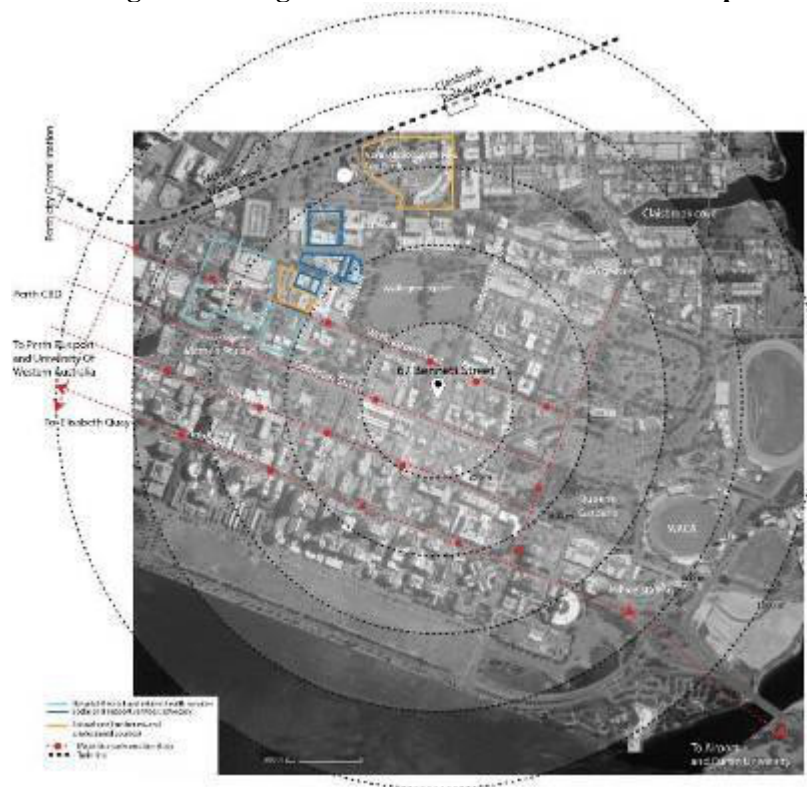
*In these streets opportunities for interaction between the public and private realms should be maximised at lower building levels while separation between buildings at upper building levels should be provided to ensure appropriate amenity for occupants of buildings and enhance the outlook from the public realm. (CoP2017b, 6)*

To facilitate this, the design guidelines dictate buildings to face the street and provide a legible, visible and secure entrance to these while providing passive surveillance. Moreover, new buildings within the precinct are required to be designed with energy-saving in mind by maximising passive solar design and adding adequate features, including insulation and solar hot water heating and landscaping. The following section provides a more detailed outline of the building amenities.

The 67 Bennett Street, East Perth development represents a case of higher density housing within the inner City, targeting specifically low-income earners and eligible applicants who work in the City.

Site visits of the precinct identified the following neighbourhood amenities mapped in Figure 1 and listed in Table 2 and revealed a series of both positive and negative physical and social aspects in the neighbourhood captured in Table 3.

**Figure 1 – Neighbourhood and local amenities Map**



**Table 2 – Site visit observations – daytime**

Figure Ref.	Location	Distance*
1	Bus stop	150 m
2	Wellington Square park (playground)	200 m
3	Restaurants and eatery	150 m
4	Post office	150 m
5	Commercial area	200 m
6	Queen's Garden	400 m
7	Perth Royal hospital	500 m
8	Social and health support services	500 m
9	Langley Park (river access and playground)	650 m
10	Cricket ground (WACA)	700 m
11	Education (TAFE)	700 m
12	Mclver Train station	750 m
13	Claisebrook Cove (river/café/restaurants)	780 m
14	IGA grocery	800 m
15	Claisebrook Train station	800 m
16	Perth City Farm	850 m
17	Perth Central Train station	1000 m
18	Perth City mall	1000 m

**Table 3 – Site visit observations – daytime**

<b>Negatives</b>	<b>Positives</b>
<b>Physical</b>	
High levels of traffic and noise on adjacent main roads	Footpaths are in good condition with wide and smooth surface
Lack of entertainment (sport) and public (e.g. community centre) facilities	Easy access to free public transport (CAT) toward Perth CBD
Limited to no shade on the footpaths	Public transport options – towards neighbourhoods located both south and north of river
This part of Perth CBD features mainly short stay accommodation and offices	Access to the central train station via free public transport
Lack of activation of ground floor space conducive to social interaction	Easy access to green spaces and river
Paid parking option only	
<b>Social</b>	
Limited access to grocery shopping	Proximity and accessibility to social services (walkable distance and free bus)
Excessive private vehicle parking costs	Proximity and accessibility to hospital (walkable distance and free bus)
Only private recreational amenities (cost-prohibitive)	Tertiary and vocational training facilities at walkable distance
Low level of pedestrian activity	
Lack of primary and secondary public schools (all private)	

Concerning the building features of 67 Bennett Street, these are extracted from two site visits, interviews with main stakeholders, and drawn from the interview with the Foundation Housing facility manager and the Foundation Housing website. The following building features were identified at 67 Bennett Street:

- a) Apartments – The ten-storey building counts 70 apartments, 17 one-bedroom units (including caretaker's unit) and 53 studio apartments. All apartments are fully self-contained (Fig.2).

The design of the studio apartments is compact, with a narrow corridor entrance accommodating ample storage space on one side and access to a bathroom on the other. Each studio has a small L-shaped balcony and full height glazing to increase natural light (Fig.3).

- b) Entrance – The entrance to the building is set back from the street with an open space in front, which is welcoming. The anteroom in front of the entrance is accessible via a ramp and accommodates the letterbox and has an intercom. It provides a sheltered and secure entrance to the building and independent access to the building managers'<sup>5</sup> meeting room/ interview room. The foyer of the building is open and airy, with a high soffit. In this area, there is a shared kitchen and access to the manager's office.
- c) Communal areas – The main communal areas are located on the ground floor close to the entrance. On the ground floor, there is a communal kitchen and flexible meeting rooms situated in front of the

<sup>5</sup> Currently there are two Foundation Housing employees sharing the role of building manager.





lifts lobby. Tucked away from the lobby area, the laundry facility has access to a communal drying court and gardens. This ground floor space is designed to be used by residents and host community engagement projects (Fig.4). The access corridor to dwellings is wide and provides well-lit (natural light) seating spaces to promote occupant interaction (Fig.5). On the 6th floor, there is a communal terrace with a panoramic view over the adjacent Wellington Square gardens and the city skyline (Fig.6).

- d) Sustainability initiatives – The original Foundation Housing's brief focused on environmental sustainability. They asked for the ongoing costs to tenants and Foundation Housing to be minimised. In response to the brief, the building uses a passive solar design and incorporates crossflow ventilation. Corridors are open and only sheltered with perforated panels and bring fresh air to each apartment through openable windows located above each entry door, allowing natural ventilation. Many tenants have closed and obscured these windows, as they let in the light switched on at night-time to light the corridors.
- e) Community links – The ground floor communal spaces are designed to be used by the occupants and can also be hired by external agencies to facilitate community engagement. Currently, these areas are used by building managers and tenants. Once a week, OZ Harvest, a non-profit organisation that provides food for many of the tenants occupying the building, uses the space to distribute meals.
- f) Tenant satisfaction – No official study has been conducted on tenants' satisfaction. However, Edwards (2016), reporting on the opening of the building<sup>6</sup>, writes that tenants experienced: *"genuine connectedness and the ability to really make the rooms their own. One tenant explains that the move to central Perth means he can now walk to his TAFE College, which has impacted his attendance and enthusiasm for the course. Work experience has also been easier to come by as a result of his proximity to public transport. Another tenant has enrolled at the University of Western Australia and is cycling to his classes, as opposed to catching one bus and two trains. His travelling time has reduced by almost two hours, directly impacting his quality of life and the time he now has for study and social activities"* (42).
- g) Security and safety – The building is under 24hr surveillance. Staff are also present on-site 24/7. The building is accessed using a pass. There is a gate that closes the sheltered area of the entrance to the building at night-time. All downpipes in the building run inside cavity walls to avoid people climbing them to access the building. A high mesh was recently added over the car park railing to prevent people from jumping over the car park rail and accessing the building.
- h) Furnishings – The apartments are fully furnished, and tenants receive a welcome pack with bedding on arrival.

Fig 2



<sup>6</sup> Australian Institute of Architects Western Australia Chapter, The Architect Magazine.

Fig 3



Fig 4 Fig 5

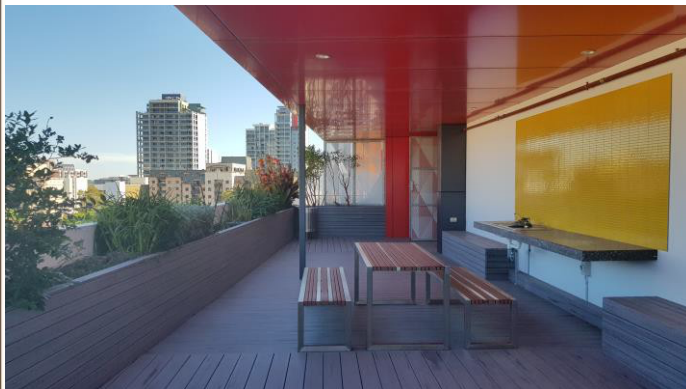


Fig 6





## 5 Conclusions and Further Research

In conclusion, the five key components of the liveability framework allow for a thorough assessment of the whole precinct, the building and its use. The adoption of the liveability framework as assessment tool of best practice examples is successful only when considered as a set of multidisciplinary fields of expertise as demonstrated by the richness and variety of stakeholders involved in the interview process who were able to comment on all sub-elements of the five key components.

The design quality is an essential component in contributing to successful liveable outcomes of the social and affordable housing against each of the five key areas of the framework. In particular, the design of 67 Bennett Street strives to create a sense of place by offering spaces for community engagement on the ground level, corridors and terrace, and provides a level of accessibility adopting generous standards in some areas thus exceeding the minimum regulatory settings for space planning, cross ventilation and natural lighting. In relation to the value equation and cost benefit, it has to be noted that some design decisions prioritise the aesthetics and material quality of the building rather over the investment in sustainable construction systems. Further research is proposed to look at inquiry by design as a way of achieving high quality outcomes holistically against the framework rather than a collection of individual components.

## 6 Acknowledgement

This paper draws from a larger research on Housing Affordability conducted as part of the SBEnrc research project over the period 2014-2020. ( Kraatz et all 2021).

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