



Section B Planning and Implementation
Part 2 Social and Holistic Development Initiatives

CHAPTER 7

Liveable Communities

7.1. Introduction

A key thrust of SJER is to create liveable communities that encompasses quality housing, adequate facilities, quality services and a healthy, safe and lively environment.

In line with this objective of enhancing the city living environment, the city must be functional, liveable and impart a sense of community and belonging. In addition, the city must also provide a clean, healthy, safe and caring environment that caters to the needs of all stakeholders. To this end the CDP plans not only for the current needs of the population but also for the future, ensuring that inter-generational equity is also sensitively addressed.

7.2. Goals

A key goal for SJER in this regard is to create liveable communities that are active, comprehensive, safe, well managed, sensitive to the environment, well-designed and built and well connected.

In meeting this goal, a fairer distribution of social and cultural infrastructure and the provision of adequate choices of housing in terms of types and cost is emphasised in the SJER.

LIVEABLE COMMUNITIES GOAL

Create Liveable Communities that are active, comprehensive, safe, well managed, sensitive to the environment, well-designed and built and well connected.

7.3. Liveability In South Johor

In creating liveable communities, the following factors are to be taken into consideration:

A. Quality of Living Environment within Low Cost Housing Projects

There is a common perception and many cases common reality that low cost housing is synonymous with poor environment quality. They tend to be dirty, unkempt, disorderly and crowded. The resulting negative effect of such low-grade, low-cost housing on adjoining properties have tended to result in low-cost housing developments to be located in marginalised, unattractive and peripheral areas, in the process perpetuating the vicious cycle of the lower-income group by reducing access to greater facilities and economic opportunities.

KEY DIRECTION:

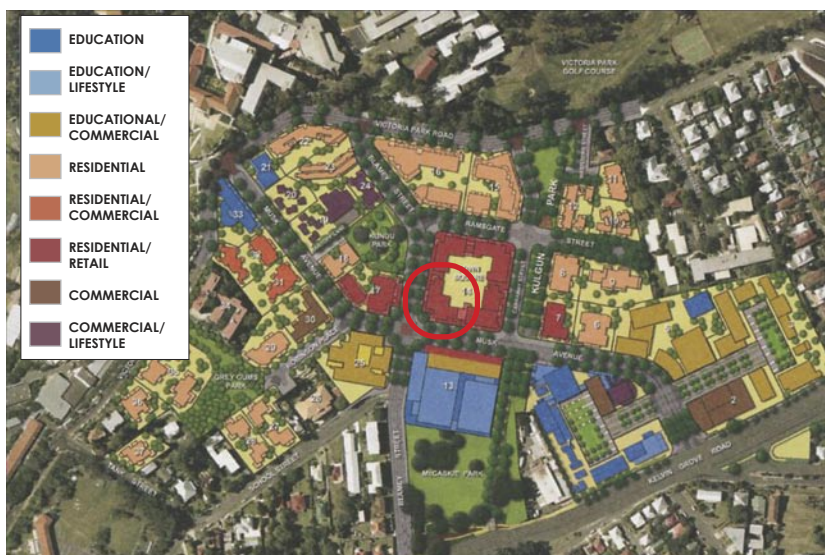
LC 1: Integrate low cost housing developments with other types to give residents common facilities and environment and reducing social marginalisation.

The need to integrate low cost housing or public housing within the larger community is important to promote a common sense of pride and belonging to the broader community.

One of the basic factors that would contribute towards this success is the external design of the low cost housing; they need to blend in with other types of housing. The residents of the low cost homes will share common facilities with the others such as open spaces, playgrounds, community halls, mosques and prayer halls. There should be no fencing to demarcate the different types of housing. These are seamless developments meant to integrate the communities, not demarcate

and marginalise by income levels. The pictures below show examples of such developments in Australia and Canada, where low cost or public housing is integrated with the overall redevelopment sites. From the outside, the quality of the buildings looks just like any other higher priced housing within the vicinity.

Figure 7.1: Example of Integration of Types of Housing



Example of Low cost or public housing at Kelvin Grove Urban Village, an inner city redevelopment in Brisbane, Australia. These housing are integrated with other housing types, situated next to the Town Square, as shown in the overall layout plan.



Non-market housing at False Creek, an inner city redevelopment by the private sector in Vancouver, British Columbia, Canada. The housing blocks are integrated within much higher priced properties in which the community share common facilities such as child care centres, community halls, gym and recreational grounds

Source: SJER CDP, 2025

B. Housing for Transient Population

KEY DIRECTION:

LC 2: Provide Rental Homes for Transient Population

It is envisaged that the development of SJER will encourage rural-urban migrants in search of work in the city. Though there are many FELDA settlements outside SJER, it is further anticipated that migration from other parts of Johor and Peninsular Malaysia will occur.

As such, the need to build rental homes for this transient population is important to avoid squatter areas or dilapidated village homes being created. Such homes in the form of hostels can also be built especially for the low income and single workers. Hostels would be a viable option for these groups as a temporary shelter whilst they settle into the area and earn enough to rent better accommodation within SJER.

C. Housing for Special Needs Group

KEY DIRECTION:

LC 3: A detailed register of data, including income levels, affordability and location preferences of the Special Needs Group must be kept and constantly updated to match up with residential units offered in the market.

Priority must also be given to special needs group, depending on their particular needs, in units offered by the private sector developments. The disabled, the aged, single mothers or abused women have specific

needs in terms of their housing units. With a proper register that also indicate the income levels, their affordability as well as location preferences, local planning authority can act as the match maker between the developer and the special needs group even before the units are built. Local planning authority can make it as compulsory for the developer to provide one or several units for the special needs group.

A sweeping policy should not be imposed on developers on the provision of units for the disabled or other special needs group of people, as implementation and monitoring will be difficult. However, with technology that can assist in the matchmaking based on the comprehensive register; the housing needs of this special group can be seriously addressed.

KEY DIRECTION:

LC 4: New Housing developments should incorporate the needs of the disabled in the units allocated to them. These include sizes of doors, ramps for external areas, height of light switches, hand rails for bathrooms and toilets.

It is recommended that upon confirmation of the purchase of a unit by the disabled, the developer will incorporate the minimum design standards for the disabled. Local planning authority should include the design standards for the disabled as by-laws for implementation:

PROPOSED MINIMUM DESIGN STANDARDS FOR BARRIER FREE HOUSING ENVIRONMENT:

- i. Ground Floor Units be given priority for the disabled
- ii. Provision of ramps from public use areas (car park, corridors, etc) to the main door of the unit;
- iii. Width of the all doors to be at least 1.1m;
- iv. Height of light switches to be at 1.1m from the floor level;
- v. No drop in internal floor levels, except the bathroom;
- vi. Hand rails for bathroom and or toilet.

D. Sustainable Neighbourhood Design Elements

Traditional land use planning in Malaysia has tended to create single land use zoning where each type of housing product; detached units (bungalows), semi-detached, terraces, town houses or apartments, are distinct and separate unto it. The result is clusters of single residential types – terraces will be grouped with terraces; semi-detached with semi-detached; apartments with apartments; and so on. This inevitably leads to communities made up of more or less homogenous income levels existing in clusters; effectively further widening the social divide within communities.

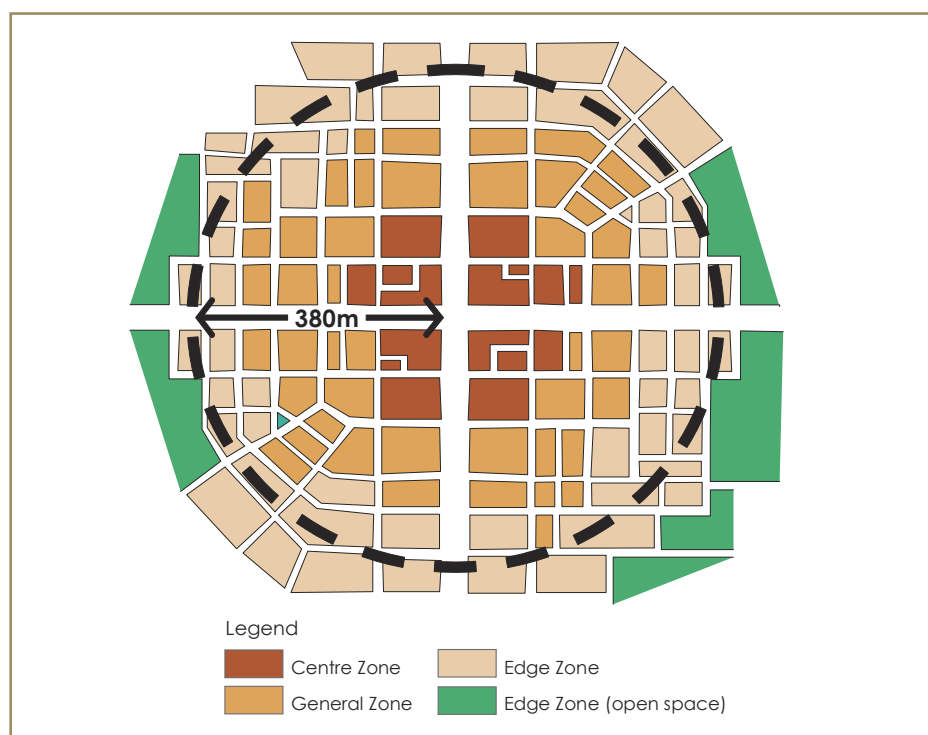
In true community planning, the focus is on an interconnected neighbourhood where the distinction between homes and incomes is blurred by creating subtle transitions between them – allowing two different housing types to share a common open space. Using architectural detail on different types of homes reduces the apparent difference in income levels and helps allay fears that lower property values are inevitable when proximity exists between the two different types of houses. Therefore, it may be worthwhile to know which neighbourhood design could help in the creation of sustainable communities.

KEY DIRECTION:

LC 5: Create Neighbourhood Structures that promote a sense of belonging to the local community

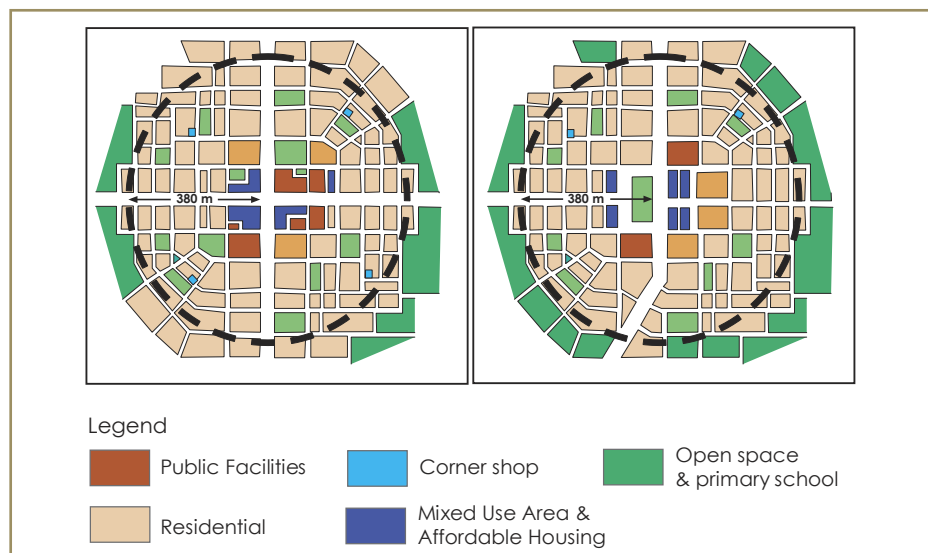
Neighbourhoods must be planned and designed to promote community living where residents can put down roots with a sense of place, identity and belonging. Urban spaces like parks and neighbourhood shops must be strategically located as centres to encourage local residents to congregate and meet and thus instil a sense of community to the area. Development at the edges of a community area can be less dense and allow for larger block type of development (see Figures 7.2 and 7.3).

Figure 7.2: Neighbourhood Structure- Divided into Centre, General & Edge Zone



Source: SJER CDP, 2025

Figure 7.3: Residential Neighbourhood (Typical)



Source: SJER CDP, 2025

Table 7.1: Recommended Sustainable Neighbourhood Designs

- i. Enhance paths (roads, lanes, walkways), which are the main corridors through which most of the community activities go through. They provide the linkage within the area as well as between areas; Ensure footpaths are connected and remain unobstructed throughout the neighbourhood.
- ii. Make edges demarcating neighbourhoods via landscaping features; edges are another feature that mark distinct neighbourhoods, as they provide visual clarity that evokes an identity
- iii. Create nodes at the centre or core of an area which also provide neighbourhood identity.
- iv. Provide for street design with interconnected circulation that creates focal points for reference and community identity.
- v. Planting of shady trees that will reinforce pedestrian scale along neighbourhood streets.
- vi. Create shared common open spaces amongst residents of different types of housing that will help in giving a focal point within the neighbourhood. They should be considered the primary organising elements of communities.
- vii. Allowing for meeting points at street corners is another way of creating a sense of place especially within the typical layout plans where the roads are a major component and dictates the design.

E. Creating Safe Living Environment

With the aspiration of a world class living environment, SJER has to ensure that safety and security be given the highest priority. Total reliance on security surveillance system and policing can be prohibitively expensive. In addition to appropriate use of such security surveillance and policing system, the living environment can be enhanced from a security safety standpoint through environmental design. In its best form, this is a more pro-active solution while also promoting social integration as the built environment also encourages natural public surveillance.

KEY DIRECTION:

LC 6: Design of new developments and redevelopment of housing areas shall refer and conform to guidelines of Crime Prevention through Environmental Design (CPTED).

It is recommended that the CPTED is formulated to guide designers and developers. The objectives of the guideline are:-

- To reduce crimes in public areas;
- To create safe and better environment for SJER citizens and tourists;
- To ensure that issues of community safety and crime prevention are adequately considered in land use, development and redevelopment activities.

Most advanced countries are now applying the approach of CPTED in planning. The application of CPTED in the built environment can reduce the likelihood of crime. CPTED can guide the design plan towards a development that reduces crime, enhances community safety and improve liveability.

The CPTED is particularly aimed at development that includes publicly accessible areas and high activity generators, such as:

- Commercial and district centres;
- Mixed use residential/commercial development;
- Medium and high density residential development;
- Subdivisions involving newly developing areas;
- Parks and open space or publicly accessible areas;
- Community uses;
- Sports, recreation and entertainment areas; and
- Other high uses areas where crime may be an issue

Aspects that can have a significant influence on the safety and security of a space are:

- Visibility;
- Access;
- Amount of natural light;
- Location and proximity to other facilities;
- Orientation (where the building faces);
- Landscaping;
- Building materials and finishes;

- Building design and cubicle configuration; and
- Management, maintenance and security.

General planning and design considerations that will subsequently be looked at in formulating the set of guideline for CPTED shall be:-

- Natural surveillance;
- Casual surveillance opportunities and sightlines;
- Land use mix and activity generators;
- Definition of use and ownership;
- Exterior building design;
- Lighting;
- Way finding; and
- Predictable routes and entrapment locations.



Materials and construction details for bus shelter should be vandal resistant



Walkways should be clean and well maintained



Approach to public toilet entrance should be highly visible



Attendant booth should be located near entrances and predictable routes



Open space within the central business district can be used for various activities



Residential apartments with windows overlooking car park and park allow for clear sight lines

7.4. Energy Efficient Buildings

The buildings in which we live, work and play protect us from nature's extremes; heat, wind and rain among others, but these structures affect and shape our environment too. Constructing and operating buildings requires enormous amount of energy, water, and materials and creates large amounts of waste. Where and how they are built affects the eco-system around us in countless ways. The design, construction, and maintenance of buildings have a tremendous impact on our environment and our natural resources.

For example, the 76 million residential buildings and 5 million commercial buildings in the United State of America (USA) together use one-third of all the energy consumed in the USA, and two-thirds of all electricity. Buildings are a major source of the pollution that causes urban air quality problems, and the pollutants that contribute to climate change. In the USA, they account for 49% of sulphur dioxide emissions, 25% of nitrous oxide emission and 10% of particulate emissions; all of which damages urban air quality. Buildings produce 35% of USA's carbon dioxide emissions - the chief pollutant blamed for climate change.

KEY DIRECTION:

LC 7: The Green Building rating shall be used and implemented to encourage builders to build energy efficient buildings, including for residential units, and to introduce energy efficient mechanisms on older/existing buildings in the city.

The challenge will be to build smart buildings that minimise the usage of non-renewable energy, pollution and cost but at the same time, increasing the comfort, health and safety of the people who live and work in them. As the environmental impact of buildings becomes more apparent, a new field called 'green building' is arising to reduce the impact of pollution.

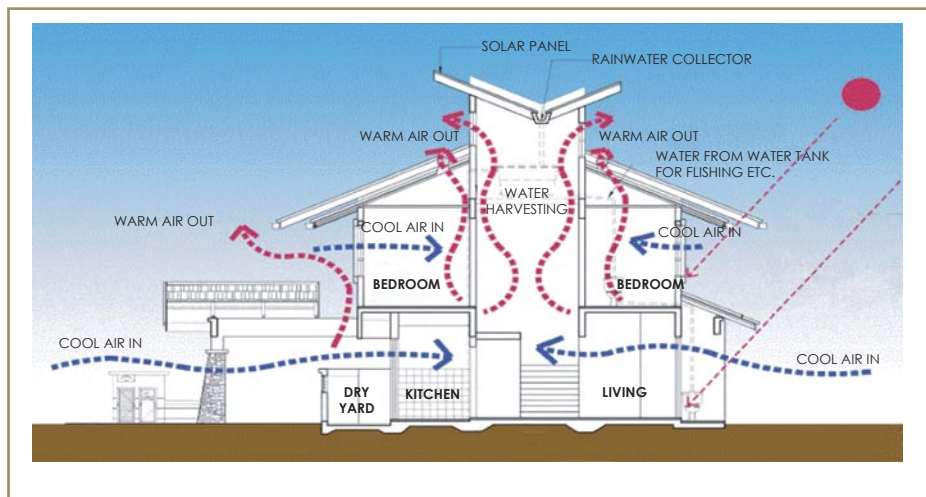
'Green' or 'sustainable building' is the practice of creating healthier and more resource-efficient models of construction, renovation, operation, maintenance, and demolition. The many elements of 'green buildings' include:

- **Energy:** Designing and operating buildings to use energy efficiently and to use renewable sources of energy – solar, wind and biomass.
- **Water:** Designing and operating buildings to use water efficiently.
- **Materials:** Using building materials that have a reduced effect on the environment throughout their life cycle (e.g. recycled content, low toxicity, energy efficiency, biodegradability, and/or durability).
- **Waste:** Reducing the waste from construction, remodelling, and demolition.
- **Indoor Environment:** Designing and operating buildings that are healthy for their occupants.

'Green building' practices offer an opportunity to create environmentally sound and resource-efficient buildings by using an integrated approach to design. Green buildings:

- Promote resource conservation, including energy efficiency, renewable energy, and water conservation features;
- Create a healthy and comfortable environment;
- Reduce operation and maintenance costs; and address issues such as historical preservation, access to public transportation and other community infrastructure systems.

Figure 7.4: Example of Efficient Design to Optimise Energy Consumption in a Typical Malaysian House



Source: Berjantai Bestari, Malaysia

Some of the simple examples that can be incorporated within energy efficient homes can be as follows:

- Compact Fluorescents – lasts longer & uses less electricity;
- Solar roofing – eg. PV Solar Tiles, toughened laminated glass, wired into home's electrical system, generating all the power a house might need; reduces electricity bill
- Dual Flush toilets – each flush uses 11 litres of water; can save as much as 26% of water if using dual flush.
- Insulation – install in between ceiling and roof as well as in the walls to minimize heat penetrating from outside;
- Using recycled plastic- combined with wood for decks – will not crack, rot or splinter;
- Occupancy sensors – to switch off lights in unoccupied rooms.

Many World Class cities have adopted this practice and have been successful in not just implementing into many of the buildings, but have also encouraged the private sector to adopt these practices; especially when encouraged by cost savings in energy bills. Cities such as Melbourne, Australia, have a policy requiring all new buildings to have a highest rating of six star in energy efficiency. The Housing Commission of Victoria, Australia, is currently also building six star rating energy efficient public housing (low cost or non-market housing), as a showcase that such developments can be feasible in order to help the low income earners.

Encouraging new buildings to incorporate a green rooftop can also assist in lowering a building's energy costs. If used widely, these could lower a city's total temperature and reduce effect of heat island prevalent in all cities today. 'Green rooftops' can assist in the reduction of emissions, increase air quality and health and more importantly, add beauty to the city.

