

Working Paper 8:
*Public Open Space
and the Needs of Older People
in the Residential Environment*

Mirvac Fini
Burswood Lakes
Sarkissian Associates Planners P/L

Introduction

- *Although there is no intention that Burswood Lakes is to be 'retirement community', demographic realities and future trends will significantly affect the residential population*
- *Expected population will consist of ageing Baby Boomers with considerable contact with young children*

Contents of this Presentation

- Australia's ageing population
- The importance of housing
- Six principal qualities older people require of open spaces
- Suggested planning and design responses for outdoor spaces

Australian demographics

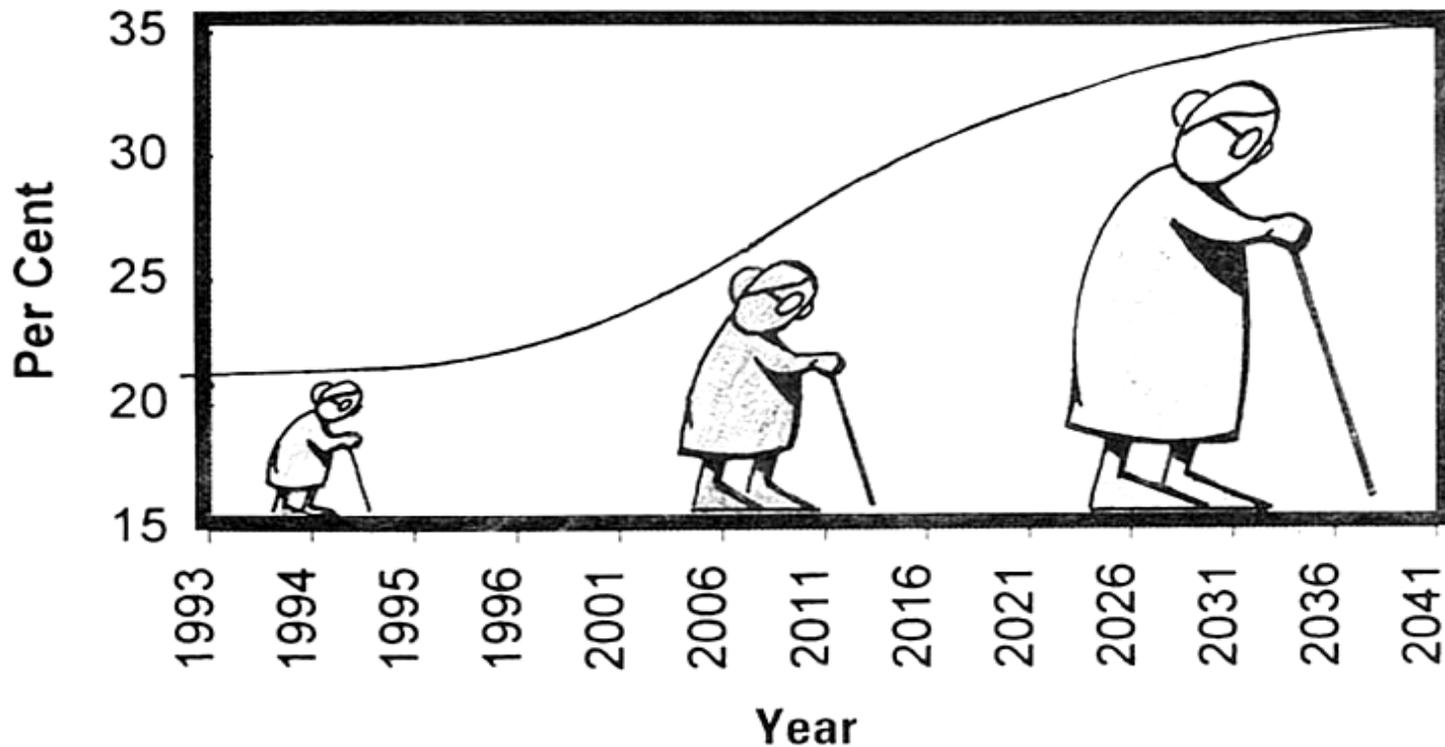
- *Australians are living longer and are more energetic as they age than their forerunners*
- *Certain inevitable characteristics accompany the ageing process*
- *An environment that supports the requirements of older people is likely to support the needs of a much broader segment of the population*

Summary Slide

- An ageing male and female population
- Not a homogenous group but many common characteristics
- Importance housing design and associated open space
- Six principal qualities older people require of open spaces

An ageing male and female population

An increasing ageing population...



Defining 'older people'

- *Older people are defined as any residents and their visitors who are aged more than 55 years or who are retired or semi-retired*

'Older People' and diversity

- *There is a spectrum of difference in physical acuity of older people*
- *NOTE: we are not talking about the 'frail old-old' component of the older population*
- *Due to the shorter life-expectancy of the Australian male, Burswood will have a higher proportion of women than men*
- *Australians are indicating a preference for 'ageing in place'*

Older People' and diversity continued...

- *require an environment that is safe, comfortable and congruent with their diverse needs*
- *not a homogenous group*
- *a range of needs and preferences*
- *share a number of common general qualities and characteristics from the ageing process*

'Older' & 'Younger' 1

- *Not expected that members of this age cohort will have young children living at home on a permanent basis*
- *A very high proportion of older people have regular care of young children*
 - *This trend is likely to continue and the proportion is likely to increase*

'Older' & 'Younger' 2

- *While designing for a mature population, it will also be necessary to make specific provision for children and supervision of children's play at Burswood Lakes*
- *An environment that meets the needs of older people and young children is likely to comprehensively support others' needs*

Working Paper 8

- *FOCUS: the outdoor residential environment*
 - *SPECIFICALLY: planning and design of common (or shared) open space and the wider public realm within Burswood Lakes*
 - *FOR: older people*

Distinguish and differentiate between:

- *Private space, garden, terrace, balcony and/or yard of dwelling*
- *Common or shared open space, regarded as territory of a group of dwellings (often in a cluster configuration)*
- *Wider public realm for use of all residents for active and passive recreation*

Characteristics of ageing 1:

- *Possible sensory and perceptual changes*
- *Potential decrease in physical mobility, changes in muscular efficiency and co-ordination*
- *Generally slower, less strong, accurate and confident in walking, climbing, gripping, lifting, pushing and pulling*
- *Experience changes in customary roles, rights and duties*

Characteristics of ageing 2

- *Potential loss in comprehension and orientation, including: memory loss, forgetfulness, disorientation and incoherence*
- *Possible reduction in social contacts, caused by retirement, loss of health, death of intimate friends etc.*

Issues affecting older people

- *Low income*
- *Suitable housing*
- *Poor nutrition*
- *Personal mobility and transportation*
- *Educational opportunities*
- *Isolation, loneliness and marginalisation*
- *Health*

Primary objectives

- *Provide open spaces that are suitable and appropriate to the needs of older people*
- *Residential environment that facilitates rather than hinders independence and interaction of older people*

Older people and the residential environment 1

- Spend a much larger proportion of their time within the residential environment than do younger people*
- Keenly aware of patterns of sun, cold and windy areas and where they can retreat during times of stress*

Older people and the residential environment 2

- *Often keen gardeners*
- *Opportunities for residents to contribute to the landscape will be highly valued*
- *Landscape designers need to ensure that design is congruent with their tastes and needs*
- *Aesthetic values of older people (landscape and building design) were formed c1950*

Psychology of home

- *Moving house can bring mixed emotions:*
 - *Excitement of moving versus the work involved*
 - *Prospect of the new versus the familiar: environment, people and experiences*
 - *What to keep and what to take? How to dispose of those items not taken?*

Older people & security

- *Tend to value certainty, routine and security*
- *Moving can be psychologically and physiologically demanding*
- *Moving from family home can significantly contribute to stress levels*
- *Moving can contribute to psychology of social exclusion and potential isolation*

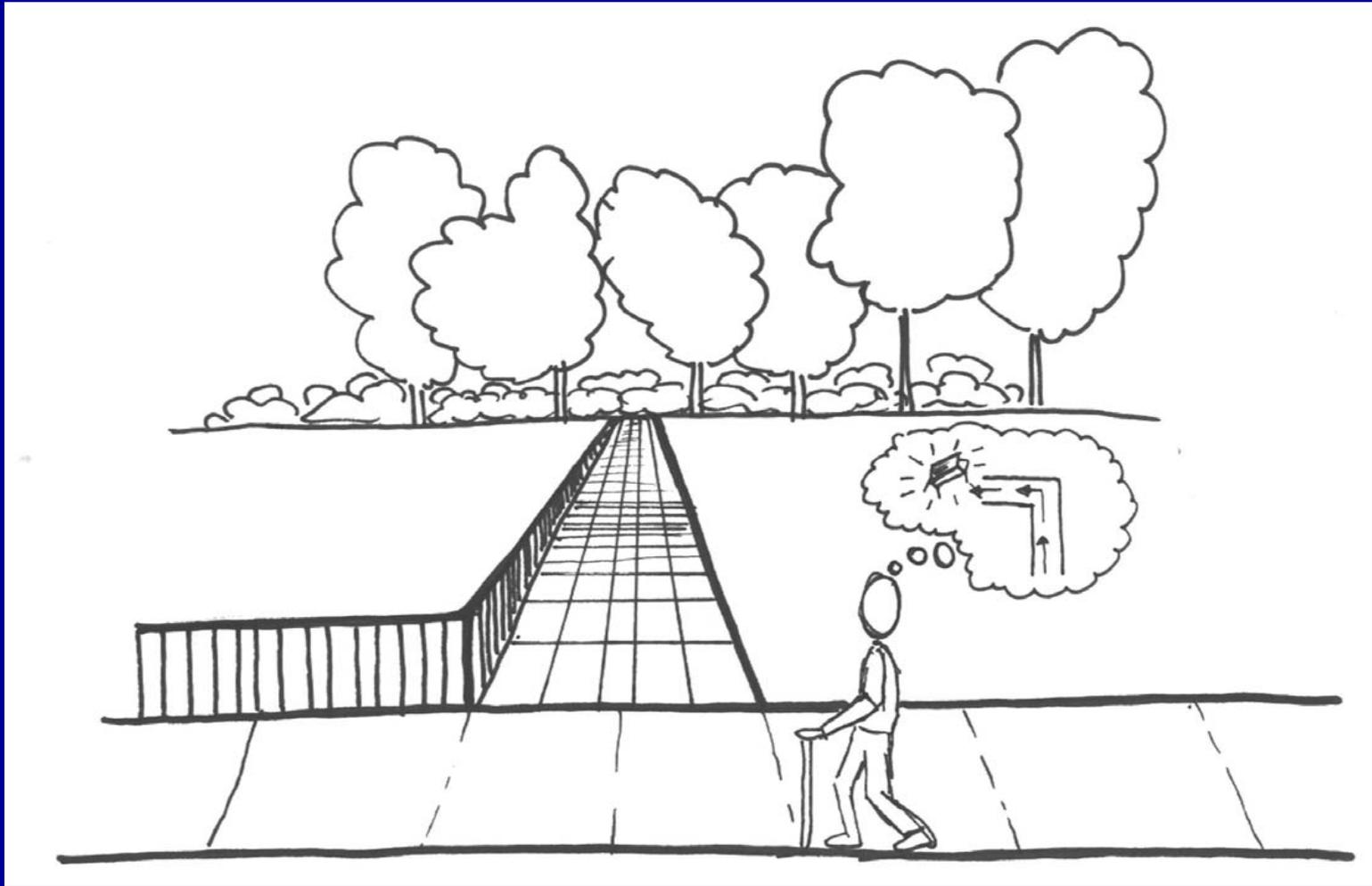
The new home needs . . .

- *To provide a supportive and congruent environment*
- *To meet prerequisites for psychological and physiological health*
 - *factors fundamental to 'social capital'*

Dwelling personalisation

- *Personalisation of environment fosters a feeling of 'ownership' and a sense of belonging and security*
 - *the person is making their territory their own*
- *Psychological benefits cannot be over-emphasised*

Making sense of the physical environment



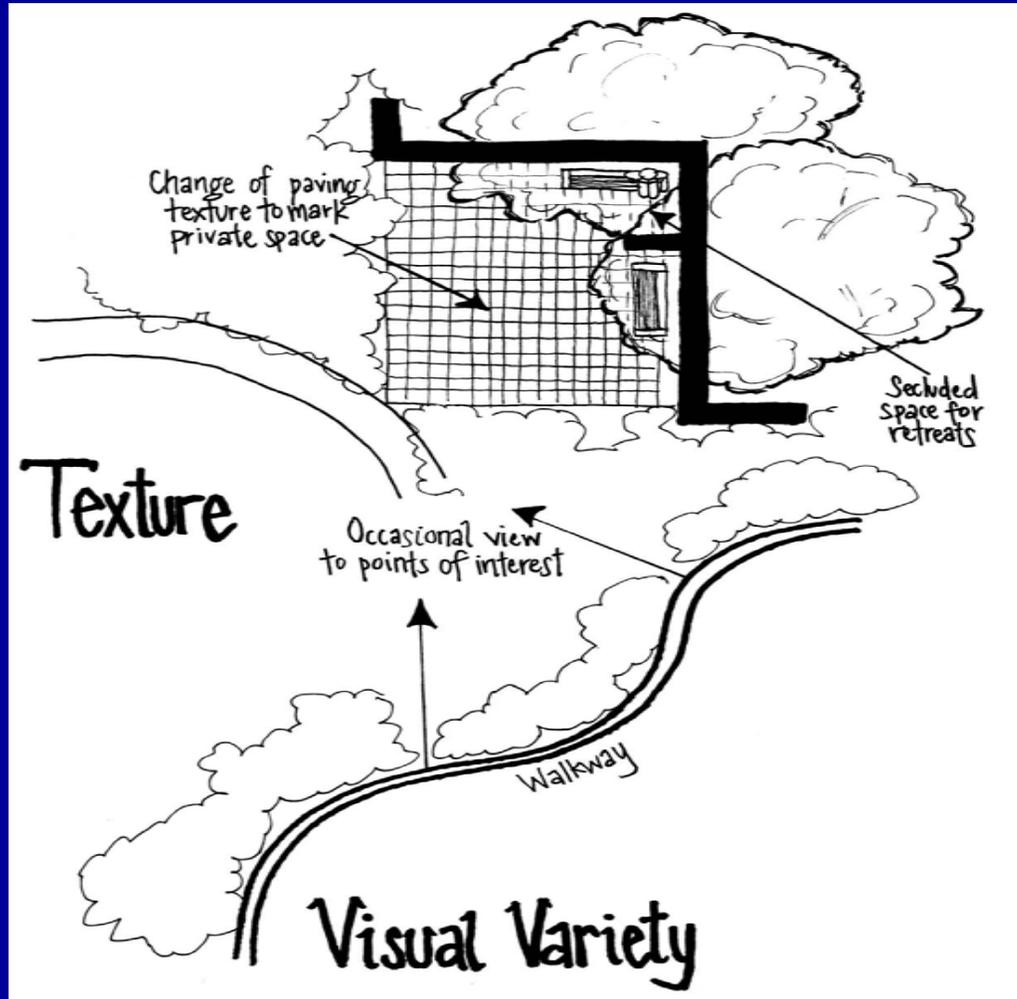
Six principal qualities older people require of open spaces

- 1. Make sense*
- 2. Potential for exploration*
- 3. Role choices and support new behaviour*
- 4. Accessible to all people*
- 5. Foster independence*
- 6. Economical to build and maintain*

Making sense

- *Open space environments should make sense*
 - *Mitigate confusion and disorientation of older people*
- *Visual cues (landmarks, signage etc) and tactile cues (handrails, wall and path texture changes)*
 - *Provide information about location and pathways so that older people can orient themselves and navigate with ease*

Texture and visual variety



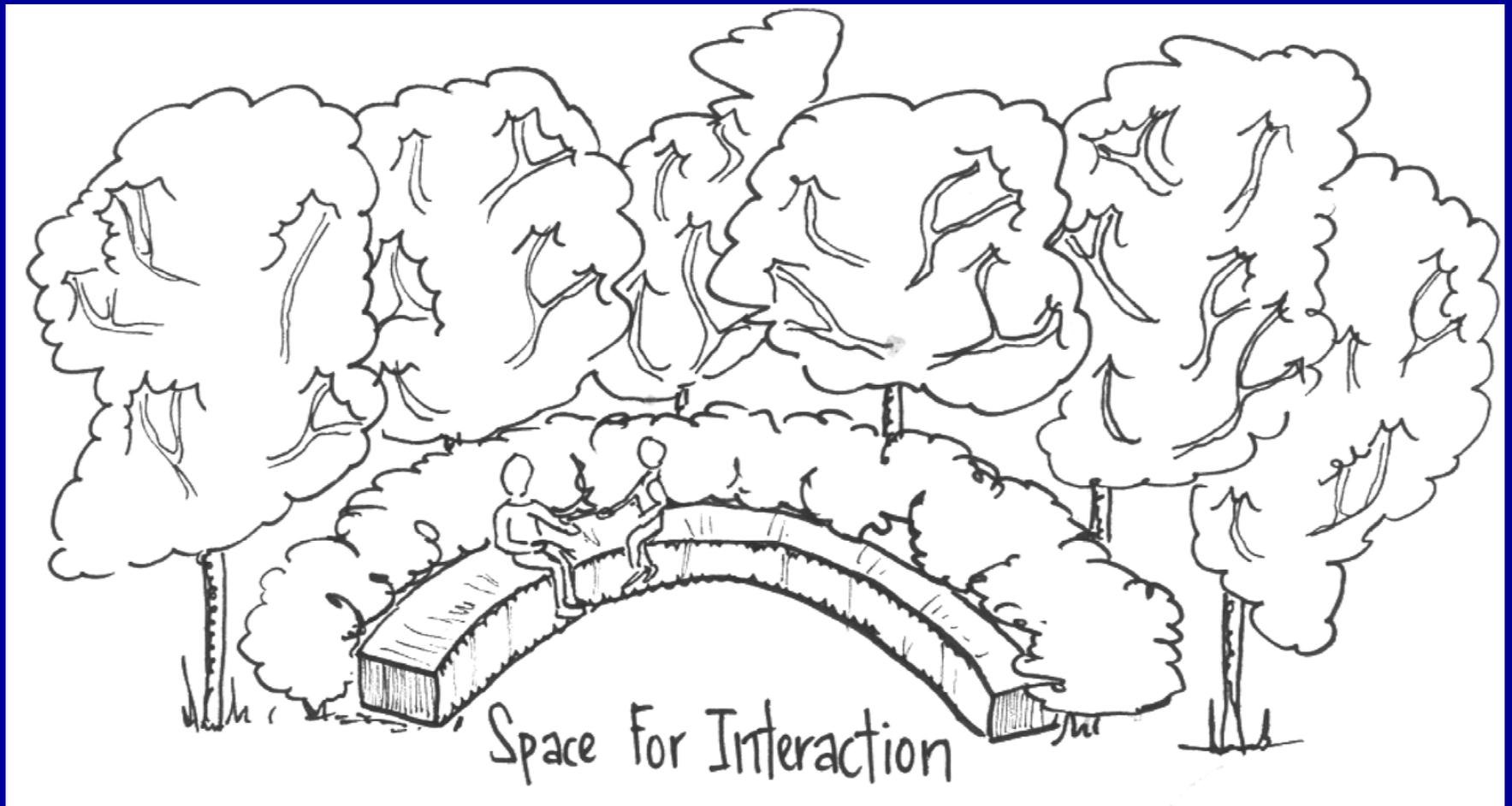
Potential for exploration 1

- *Residential environment should offer older people exploration potential*
 - *'Exploration' should be understood as providing diverse and discoverable objects, textures, experiences and sensations with an abundance of choice and possibility*

Potential for exploration 2

- *Exploration should provide sensual exploration to cater for people who have a sensory disability or impairment (visual, auditory, kinaesthetic etc)*
- *Provision of diverse and discoverable objects and textures contributes to the communication of spatial meaning and purpose*
 - *aids direction and orientation*
 - *contributes to aesthetics and textural variety of open space*

Role choices: space for interaction



Role choices

- *Residential environment should permit role choices and support new behaviour*
- *Open spaces should provide opportunities where older people can choose to be in:*
 - *An isolated niche*
 - *An area that encourages or increases the opportunity for sociability*
 - *A location that vicariously includes them yet preserves their spatial separation*

Support new behaviour

- *Older people generally fall easily into routine*
 - *Supporting and encouraging new behaviour of older people through design of open spaces is very important*

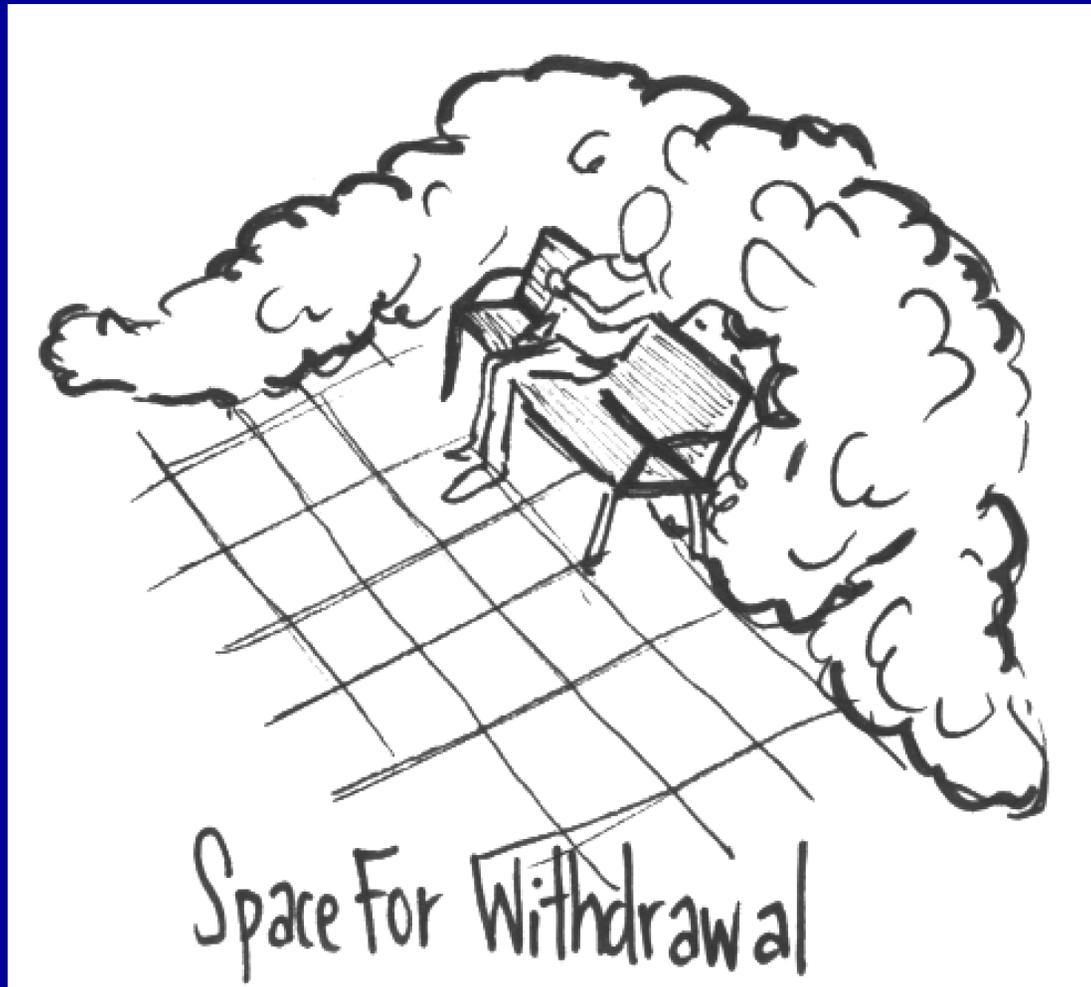
Designing for diversity 1

- *Certain open spaces should be designed to encourage a certain kind of user group through designed 'ownership'*
- *Outdoor environment should cater for a diverse community and their different requirements and accessibility*

Designing for diversity 2

- *Residential environment should be designed to foster and encourage independence*
- *Autonomy, independence, and usefulness are fostered in providing personalisation opportunities over open spaces*

*Role choices:
space for withdrawal*



Key factors influencing design of outdoor residential environments for older people 1:

- *Options/variety in types of spaces, their potential uses, location and degree of shelter afforded*
- *Proximity to main circulation routes and to common activity spaces*
- *Contact with visual/aural pleasures of the natural world*

Key factors influencing design of outdoor residential environments for older people :

- Opportunities for personalisation and territorial expansion*
- Security and freedom from intrusion and outsiders*
- Location within hearing and sight of other tenants*
- Accessibility to individual units and dwellings*

To enhance residential satisfaction 1:

- *Design and locate outdoor community spaces to reflect user needs and encourage maximum use of enjoyment*
- *Provide a variety of types of spaces, potential uses, location and degree of shelter*
- *Variety of exercise and recreational activities (active and passive) opportunities for personalisation and territorial expression*

To enhance residential satisfaction 2:

- *Place use and function clearly defined*
- *Spatial variety*
- *Variety of seating options*
- *Barrier-free environments*
- *Plan for heat, cold, sun, glare, shade and wind*
- *Plan for a changing population with changing needs*

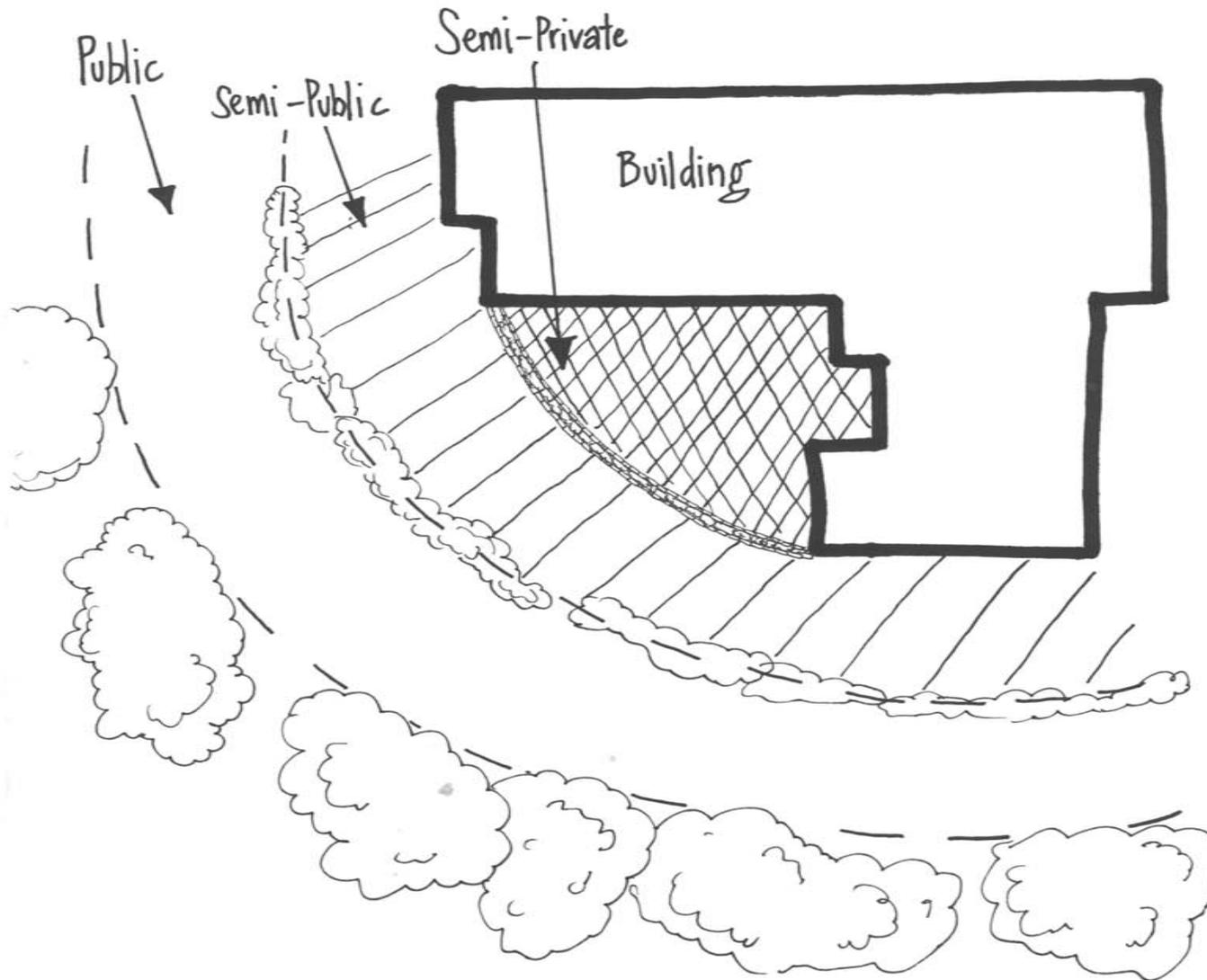
Design of outdoor spaces

- *Primary reasons for using outdoor spaces:*
 - *Social interaction*
 - *To be near activity of others*
- *Clusters of housing around shared outdoor spaces provide opportunities for meeting others*
 - *Provide an opportunity to engage in specific activities*

Importance of 'space hierarchy'

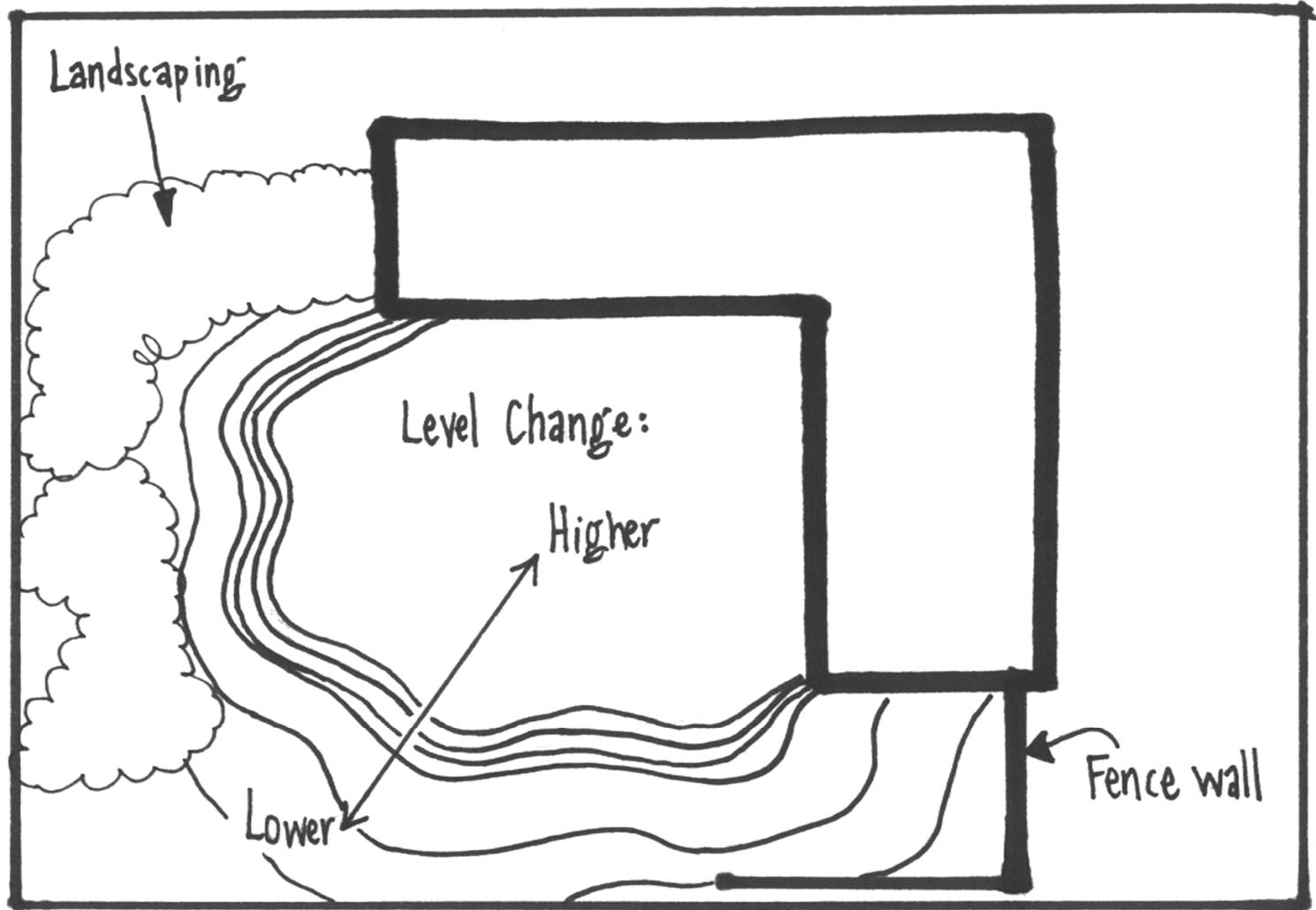
- *Critical to success of residential areas for older people is acknowledgement of the primacy of the **hierarchy of open space***

Space Hierarchy



Territorial Boundaries

Site:



Outsiders must walk around - not through site

Nodal points
at path junctions
- seats, chess,
pergola etc.

Private outdoor
spaces
adjacent units

Local
cluster
outdoor area
- bbq, seats,
planting etc.

R
O
A
D
W
A
Y

R
O
A
D
W
A
Y

Path
goes to,
but not
through,
activities.

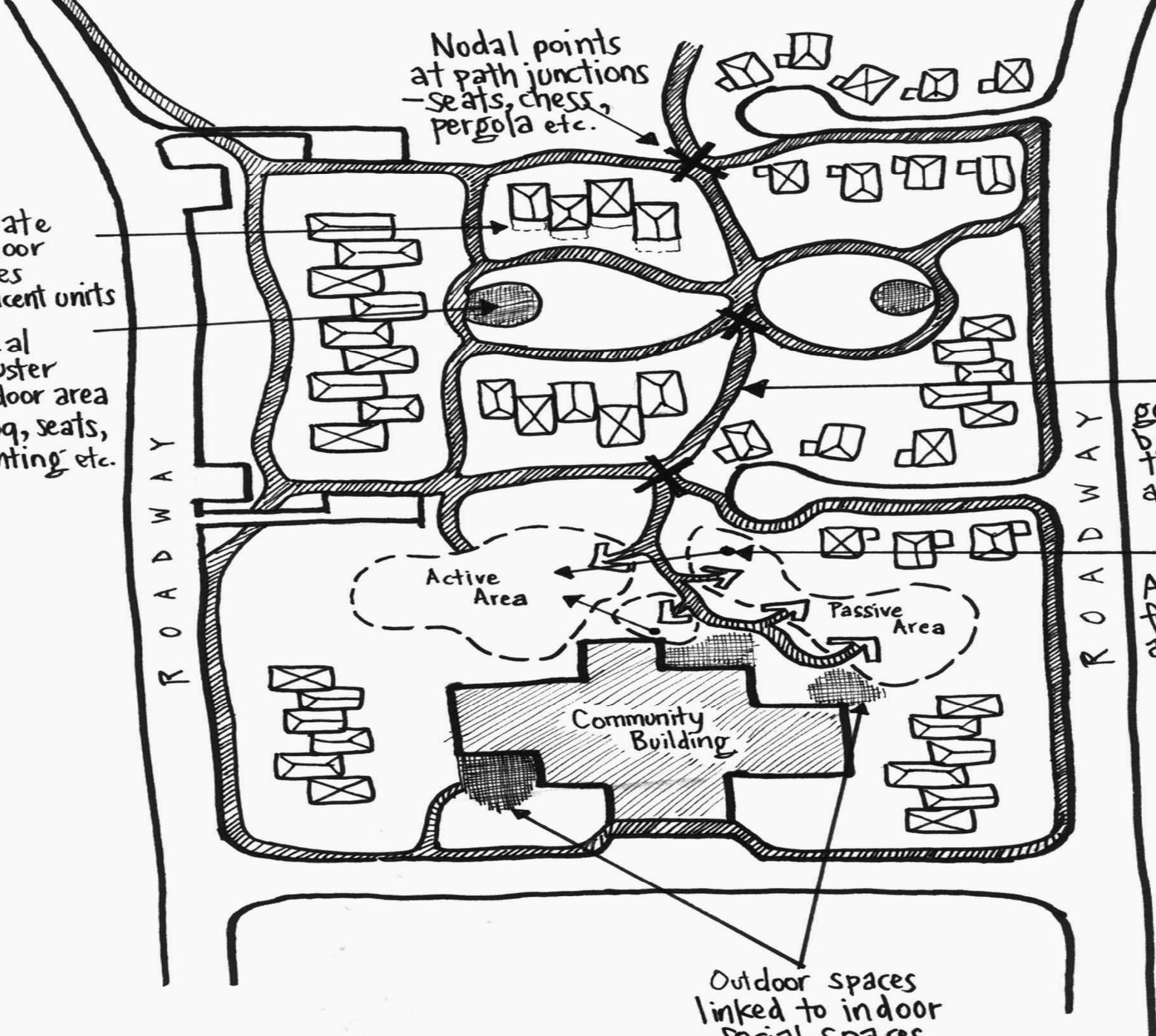
View of
Active Area
from path
and some
Passive
Areas.

Active
Area

Passive
Area

Community
Building

Outdoor spaces
linked to indoor
social spaces



To facilitate a positive relationship between older people and their residential environments 1:

- *Make clear to which specific group of dwellings each outdoor space 'belongs'*
 - *Provide focal points or landmarks in common (or shared) open space*
 - *Focal point or landmarks = fountains, bird feeders, trees, clock tower, flag pole, fish pond - to aid orientation and interaction*
- *Provide outdoor facilities for adult sport and leisure*

To facilitate a positive relationship between older people and their residential environments 2

- *Provide a variety of outdoor spaces designed for specified activities like:*
 - *Sitting in the sun or shade, alone or in a group*
 - *Outdoor games*
 - *Barbecues*
 - *Gardening*
 - *Walking without barriers or steep slopes*

To facilitate a positive relationship between older people and their residential environments 3

- Make sure the types of activities are appropriate to the adult population (their age, ethnicity and so on)*
- Set aside some areas (possibly raised planter beds) in sunny locations on the site where residents can garden*
- Provide tool storage, seating and running water*
- Make sure gardens are visible from community open spaces and units*

To facilitate a positive relationship between older people and their residential environments 4

- *Locate a carefully designed children's play area (for visiting children) where residents can watch without having privacy invaded*
- *Ensure shared areas are located so they are accessible and visible from a maximum number of points*
 - *Ensure that individual units maintain visual and acoustic privacy*

To facilitate a positive relationship between older people and their residential environments 5

- *Provide shaded seating and storage near outdoor games areas*
- *Provide landscaped seating area near development entry*
 - *Where residents can watch activity*
- *Locate outdoor games areas along major pedestrian routes or near the community centre*

To facilitate a positive relationship between older people and their residential environments 6

- People should not have to 'run the gauntlet'*
- Locate shared patios (or other common open space) for parties and barbecue pits next to interior community areas*
- Ensure common open space shared by residents of a group of dwellings has been designed so an outsider would not mistake it for public open space*
- Explicitly state function and use of outdoor community space*

Recreation

- *Loss of status because of retirement, reduced income and a youth-oriented society requires opportunities for older people to learn and engage in new activities in outdoor areas*
 - *Outdoor residential environment can greatly support this objective*

Planning for recreational equity for older people



To encourage and support recreation, active and passive activities and new learning and social opportunities 1:

- Provide a range of activities/spaces for active and passive recreation*
- Provide appropriate hard surfaces and soft surfaces for activities*
- Install active 'doing' spaces*

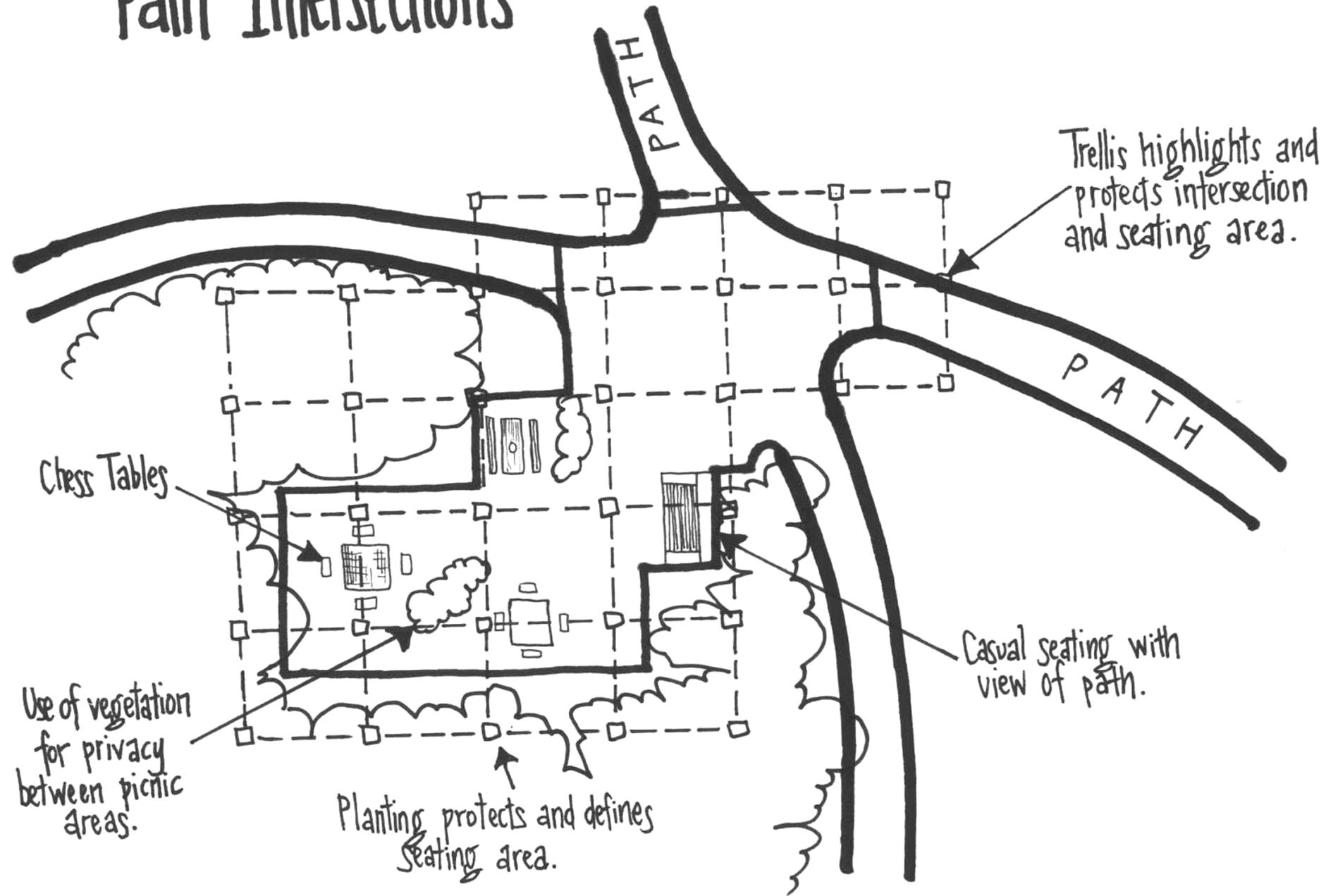
To encourage and support recreation, active and passive activities and new learning and social opportunities 2:

- *Provide appropriate viewing and observation areas so people can easily see:*
 - *Landmarks*
 - *Significant landscaping*
 - *Recreation and activity areas (eg: fountains, bird feeders, gardens, picnic area etc)*
 - *Provide a garden-like setting with trees to stroll through*

To encourage and support recreation, active and passive activities and new learning and social opportunities 3:

- Promote and support socialising and game playing through the design of appropriate facilities and spaces*
- Provide storage for special equipment*
- Provide comfortable sitting and socialising areas*
- Provide secluded 'retreats' and reflective niches*

Path Intersections

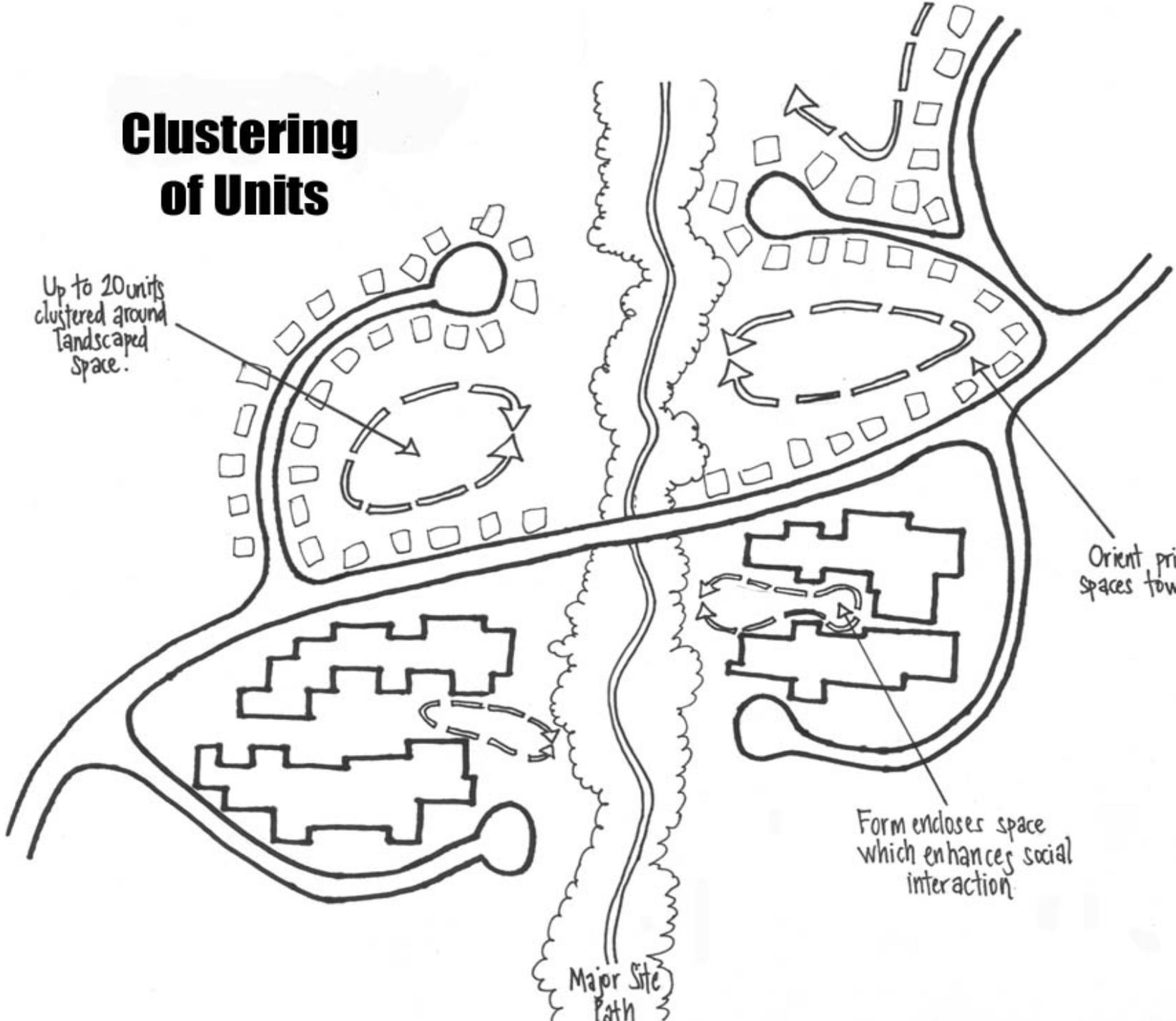


Casual social encounters near home

- *Older people tend to share an aversion in engaging more than 8 to 10 people at one time*
- *Older people tend to avoid navigating larger or more complex spaces*
 - *it is important to provide an environment that supports casual social encounters near home*
- *Small, comfortable spaces that support intimate sociability are highly valued*

Clustering of Units

Up to 20 units clustered around landscaped space.



Orient private outdoor spaces towards commons.

Form encloses space which enhances social interaction.

Major Site Path

To support casual social encounters near home 1:

- Arrange dwellings and open spaces so neighbourly social contact is possible and unforced*
- Ensure doors do not face each other across walkways*
- Avoid isolated dwellings, structures landmarks etc, at ends of corridors or walkways*
- Ensure interior and exterior common or shared spaces are surrounded by clusters of dwellings*

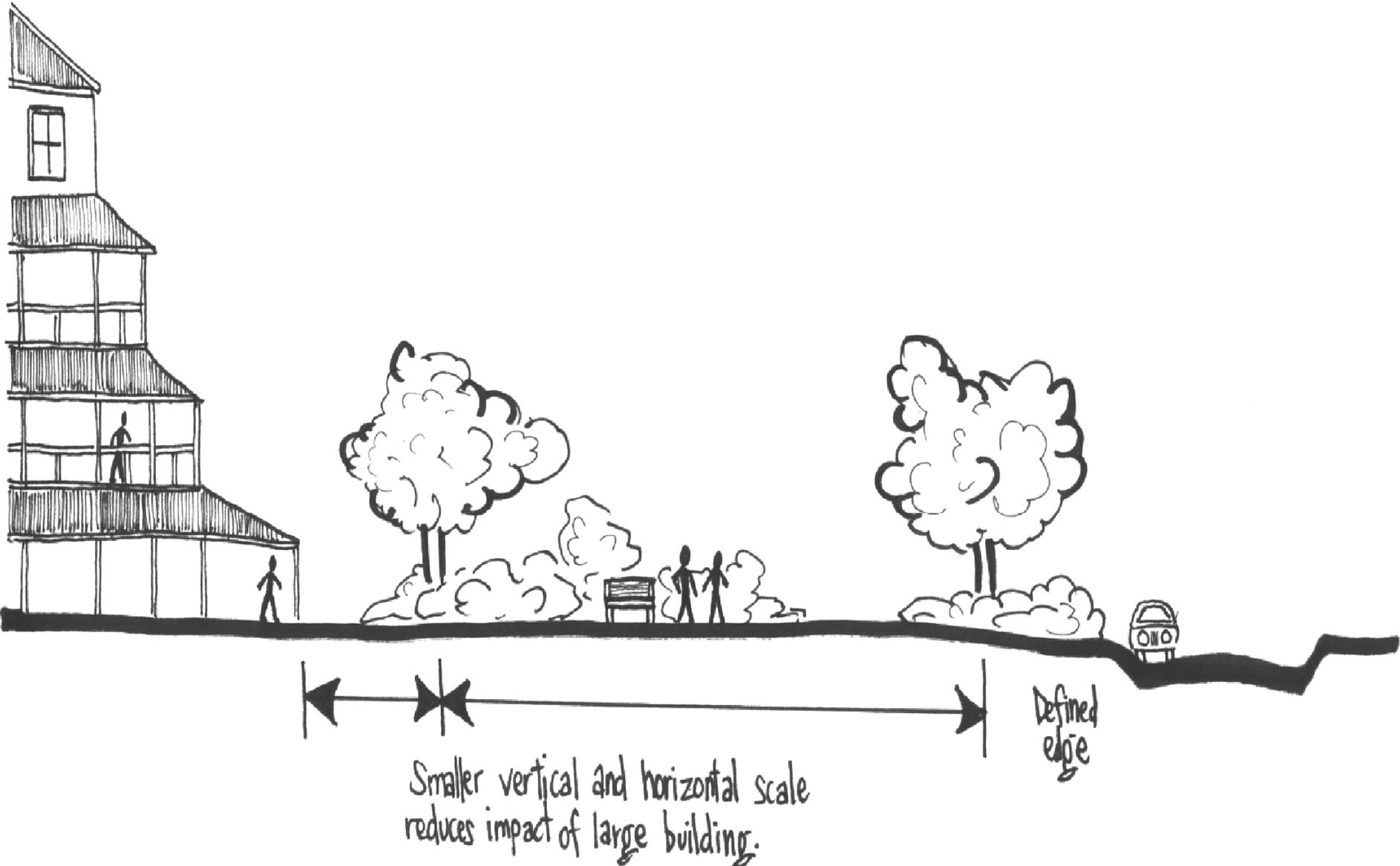
To support casual social encounters near home 2

- Provide entry and/or parking space within visual and verbal communication distance from adjacent public circulation space*
- Arrange communal facilities, like rubbish bins and mail-boxes, to have comfortable seating or a suitable social environment nearby to facilitate neighbourly communication*
- Provide comfortable seating near entranceways and throughways*

To support casual social encounters near home 3:

- *Provide seating near areas of outside activity, mail collection point, etc*
- *Provide outdoor seating areas large enough to accommodate several people without conflict*
- *Locate sitting areas on grade near units*
 - *Older residents passersby can meet and greet each other*
- *Plan small, defined outdoor spaces*

Small, Defined Outdoor Space

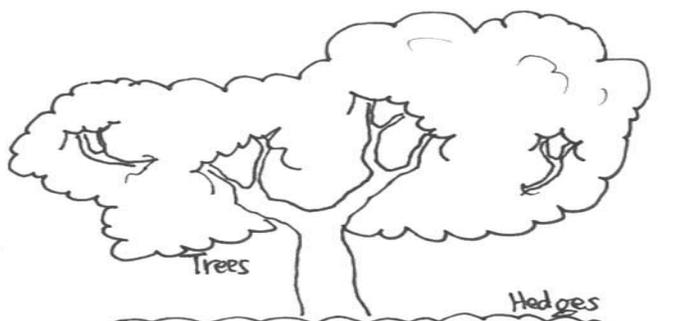


Landscaping and older people 1

As the majority of older people tend to spend a great deal of time at home:

- Gardens, parks and landscaped areas nearby are extremely important*
- Older residents especially value the natural environment*
- Often gardens and gardening are an active interest and hobby*
- Older people value the visual, auditory, kinaesthetic, olfactory, tactile, and social opportunities that landscaped open spaces provide*

Fruits and Flowers



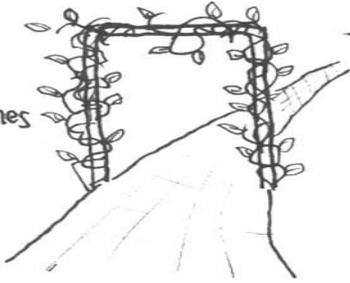
Trees

Hedges



Landscaping and Planting

Vines



Building Materials

Wood



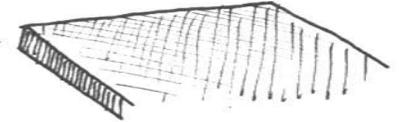
Stone



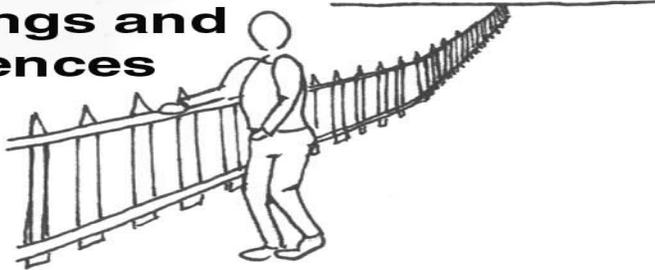
Bark



Textured Concrete



Railings and Fences

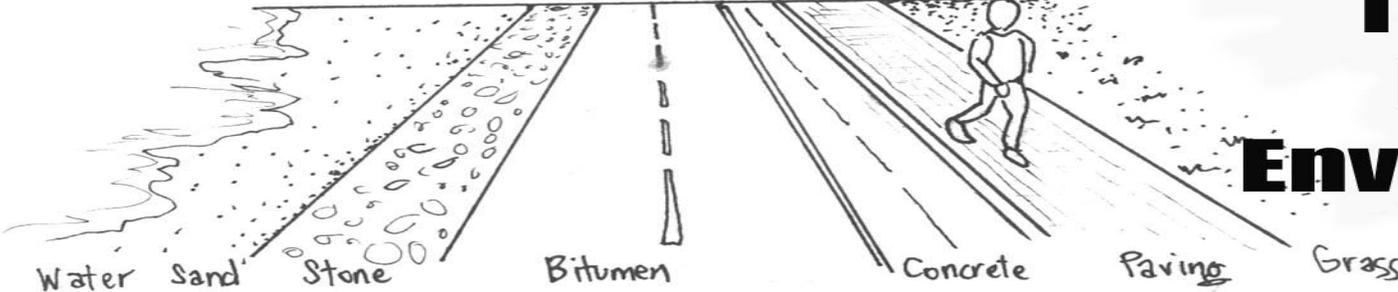


Variety of Seating Materials



-wood, metal, tiles etc

Ground Cover



Texture In The Environment

Landscaping and older people 2

- *As visual acuity is often reduced with age, choose all landscaping and plants to be hazard-free*
 - *Choice should provide and encourage an environment of sensory stimulation*
- *Landscaped open spaces should permit redesign during the life of the development*
 - *Plan for growth and change*

Landscaping and older people 3

- *Recreation patterns, community demographic and open space users may change*
- *Provide opportunities for intimate contact within small groups*
 - *While still providing visual and acoustic privacy*
- *Togetherness' should not be sought if individual privacy is sacrificed*
- *Design should be for choice: to interact or not*

Landscaped open spaces for older people 4:

- *Planned space hierarchy, communicating a clear transition from neighbourhood public space to private space*
 - *Increases control over use and defines areas for residents only*
- *Select landscaping materials for safety and security*
- *Ensure landscaping and vegetation are in harmony with nature*
- *Enhance natural features of site and promote natural beauty, comfort and security*

Landscaped open spaces for older people 5:

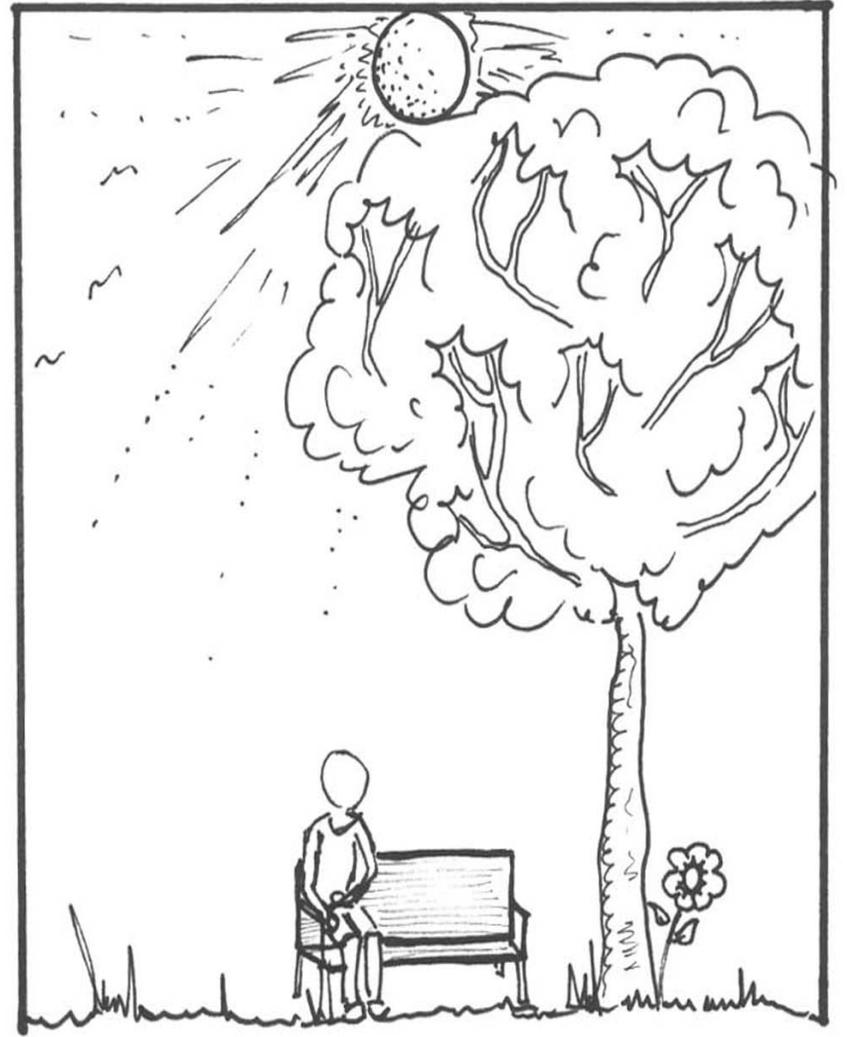
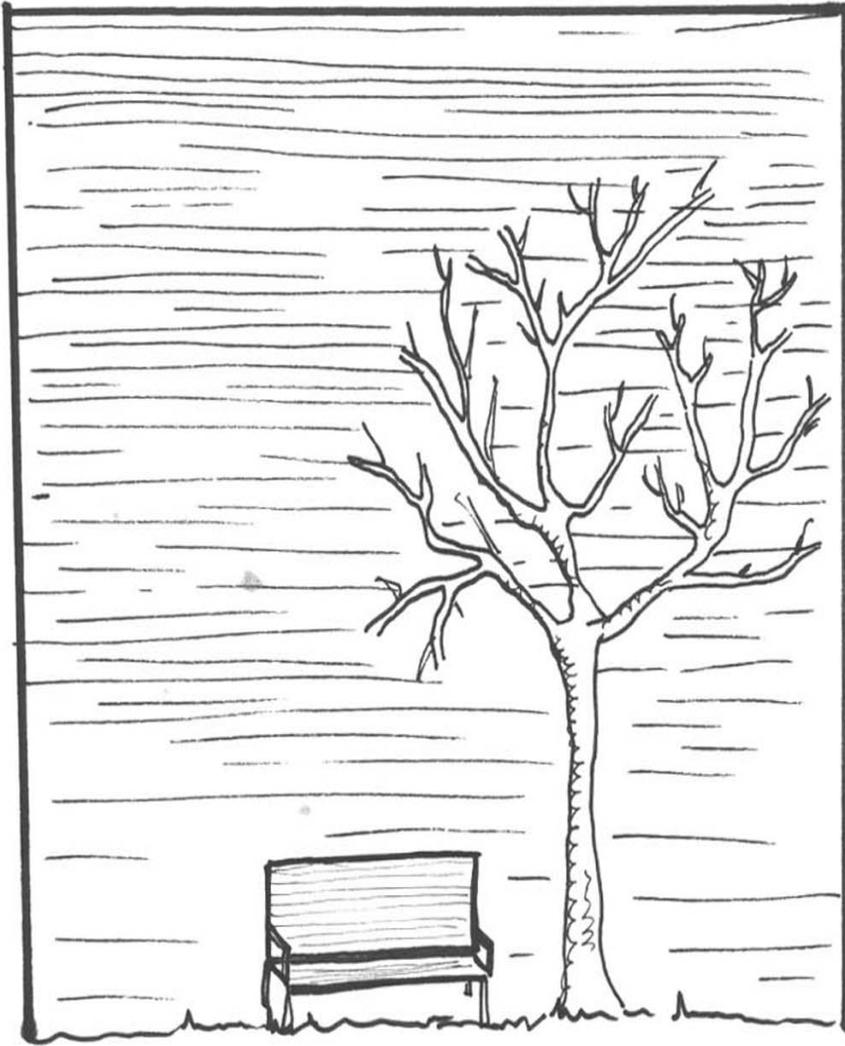
- *Fallen leaves pose possible tripping hazard to older people*
 - *Select non-deciduous plants and those that do not have leaves that will be slippery when fallen*
- *Ensure all planted areas (other than lawns), next to hard-surfaces have: timber edges, raised borders, and/or retaining walls*
 - *Ensure landscaping materials are not directed onto paths, as this can make them slippery*

Landscaped open spaces for older people 6:

- *Avoid planting fruit trees near paths*
 - *Consider provision of edible landscaping*
- *Avoid planting material which obscure vision for drivers or pedestrians*
 - *Use high-branching plant materials or low ground covers*

Landscaped open spaces for older people 7:

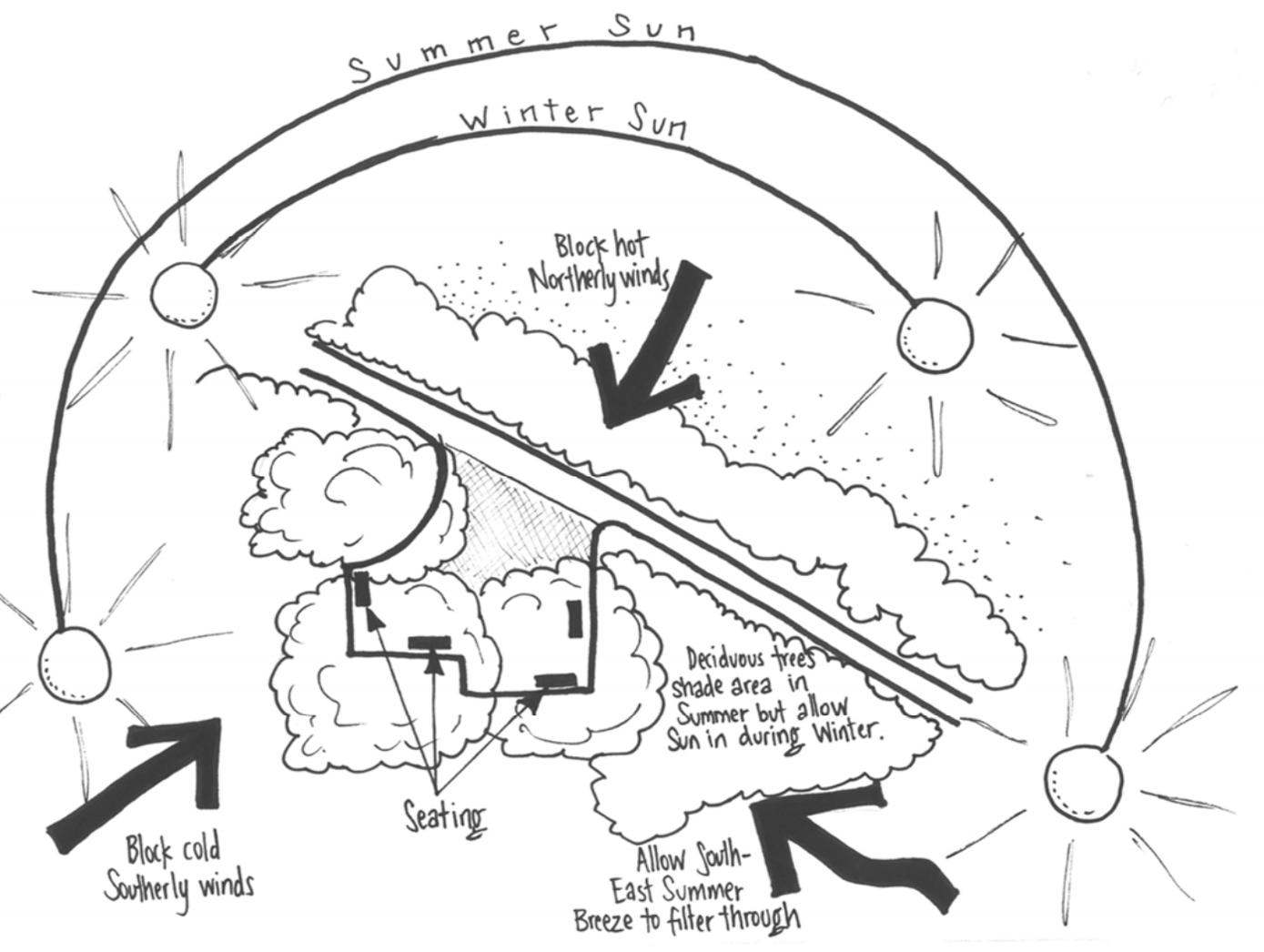
- *Select flowering plants and trees that change colour with the seasons and provide diversity throughout the year*
- *Select indigenous plants that encourage native birdlife and beneficial insects and animals*
- *Select plants and landscape features carefully to create a 'garden-like' appearance (not a park-like one)*
 - *Use flower beds and gazebos for shaded resting*



Plants Which Change With The Season

Use plants to provide:

- *Air quality*
- *Shade*
- *Privacy*
- *Define areas*
- *Reduce local wind velocity*
- *Provide seasonal interest*
- *Screen undesirable views*
- *Provide a refuge and source of food for animals and insects*



Creating microclimates with vegetation

Landscaped open spaces for older people 8:

- *Delight senses by using visual, auditory and tactile stimulation to convey image or message of a space*
 - *Fountains, waterfalls or other water features, birdbaths, flowing shrubs and trees close to paths*
- *Opportunities to modify landscaping*
 - *Ensure success of landscaping does not depend on older people's efforts*

Landscaped open spaces for older people 9:

- *Encourage residents to garden for themselves*
 - *If possible, provide older people with opportunity of a 'community garden'*
- *Provide raised flower beds and gardens to facilitate viewing and gardening without stooping*
 - *Plant material height: 635mm to 890mm enables people in wheelchairs or those unable to bend or stoop to touch and smell flowers*



Metal and Timber Seats
of different textures



Raised beds allow:

- easier contact with plants
- access for people in wheelchair

Landscaped open spaces for older people 10:

- Locate gardens to be visible from residential dwellings and structures (especially important for housebound people)*
- Combine landscaping with other features or focal points to encourage use of shared outdoor spaces*
- Provide orientation and wayfinding markers around the site*

Landscaped open spaces for older people 11:

- *Foster 'predictability' of a space to reduce confusion and conflicts over appropriate uses*
 - *Landscaping can provide a cue for intended user group, such as residents of a particular cluster of dwellings*
- *Define and differentiate spaces for use by various resident groups*
 - *Differentiate using signage, landscaping, landmarks or other visual and/or tactile cues*

Landscaped open spaces for older people 12:

*As older people often have **reduced visual acuity:***

- provide visual complexity and opportunities for close proximity viewing and provide a greater level of detailing (even to the point of 'clutter')*
- variety of images and thematic spaces, encouraging a variety of activities and maximum active and passive use of the open space*

Landscaped open spaces for older people 13:

- *shrubs or other landscape features that could conceal an intruder not located at 'problem' areas or near entrances*

Pedestrian access to the site 1

- *Older people highly value strolling and many use walking as their main form of exercise*
- *For many older people, particularly women, safety of access is a primary consideration, particularly at night*

Pedestrian access to the site 2:

- *Housing development and each housing cluster located to facilitate natural pedestrian access and visual focus*
- *Landmarks and wayfinding cues and signage help residents and visitors orient themselves*
- *Locate or relocate bus stops as near as possible to major pedestrian artery to minimise walking distance (100-500m level walk ideal)*

Pedestrian access to the site 3:

- Pedestrian crossings at suitable locations*
- Protracted crossing times and visual and auditory signals*
- Clear and convenient drop-off areas*
- All paths, accessways walkways, ramps and landings designed in accordance with AS1428: unobstructed width of not less than 1000mm*

Pedestrian access to the site 4:

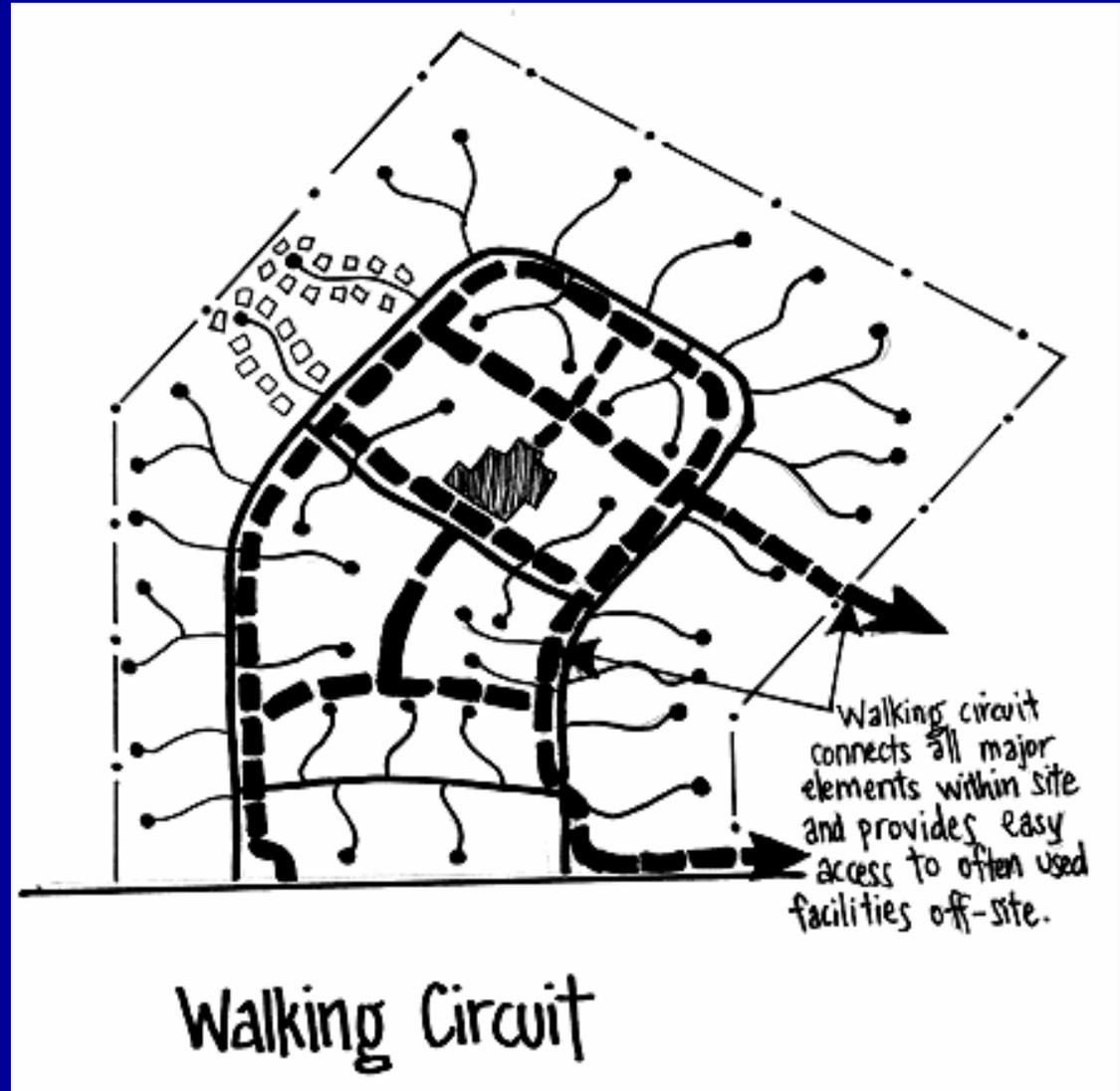
- Avoid steps, sharp gradient changes, loose ground cover, slippery path surfaces*
- Adequate drainage, lighting and handrails at all gradient changes or danger points*
- One major hard-surfaced pathway connecting most dwellings with major on- and off-site activities*

Strolling and sitting and access within the site 1

- *Research reveals profound of importance strolling and sitting for older people*
- *Walking is one of the most popular forms of exercise among older people*
 - *High percentage of older people experience difficulty walking or use mobility aids*
- *Walking actually increases with age*

Looped Walking Circuit

- *interesting and comfortable for older people*
- *valued by all users of site - not only older people*



Strolling and sitting and access within and around the site 2:

- *Paths and sitting places and landscaping with solar access, glare and wind in mind*
- *Maximising winter sun, while providing shade in summer*
- *Paths for strolling with meandering continuous 'looped' routes and constantly changing views*
- *Loop connected to an off-site path*

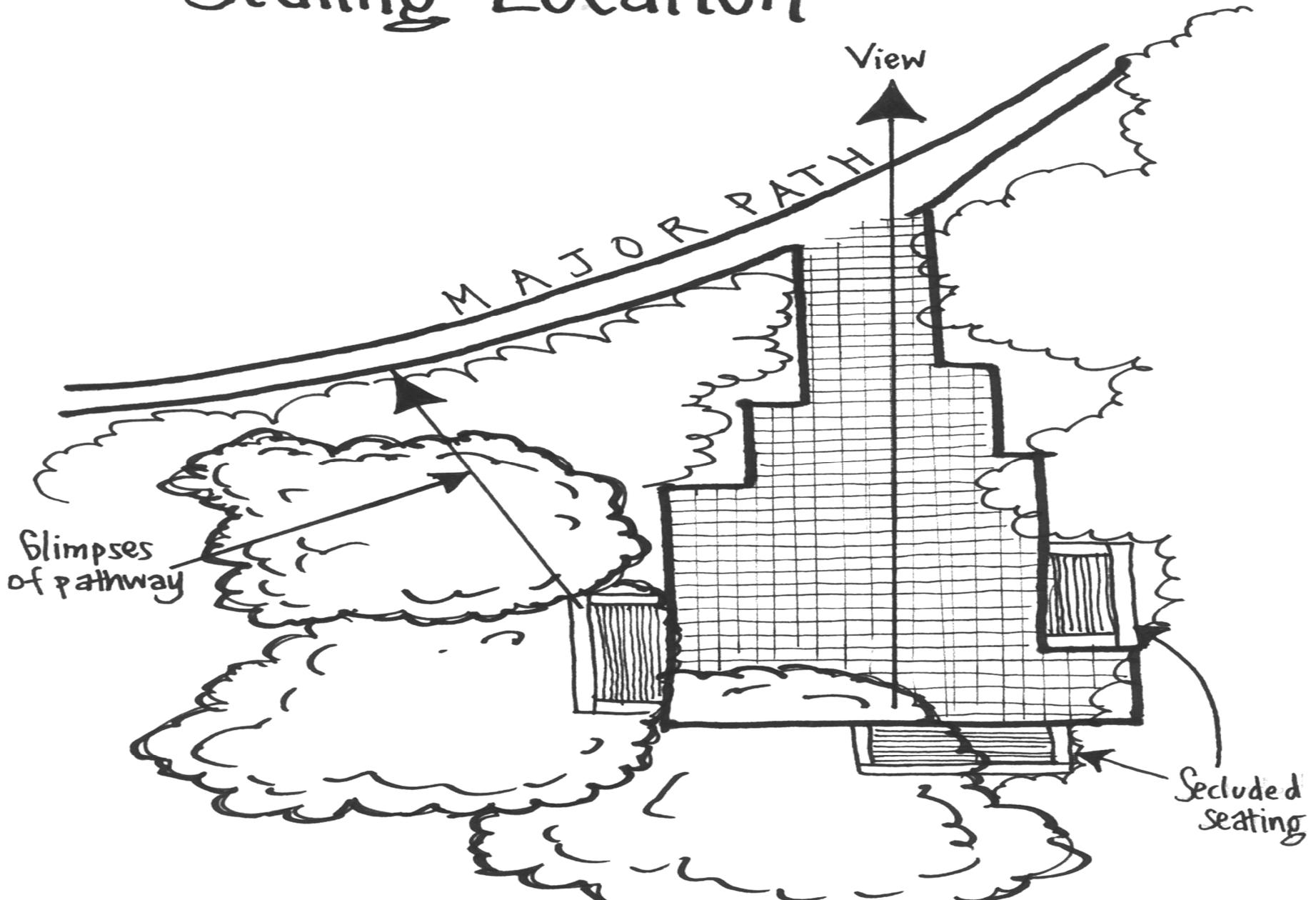
Strolling and sitting and access within and around the site 3

- *Places for people to retreat*
 - *If natural retreats not accessible, construct special features as retreats: gazebo, duck pond, waterfall or picnic area*
- *Intimate seating areas within 7m of path and at appropriate intervals*
- *Intimate seating areas do not interfere with pedestrian movement*

An accessible water feature



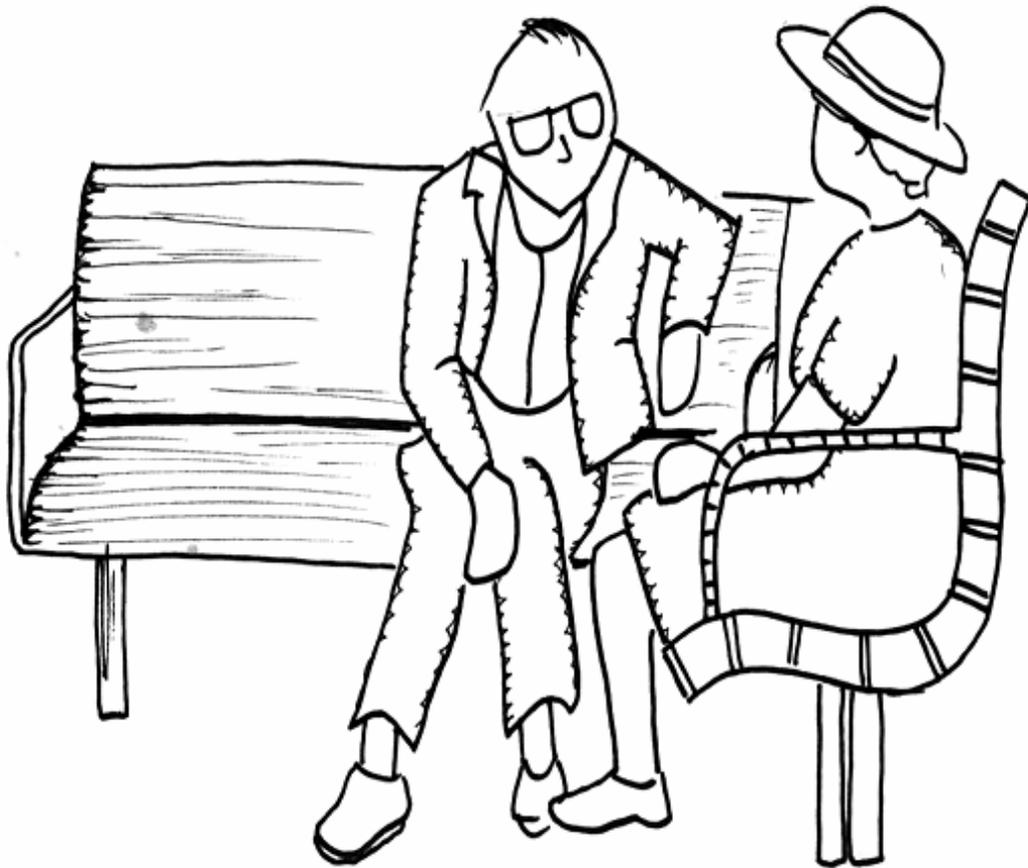
Seating Location



Strolling and sitting and access within and around the site 4

- *All seating has support and arm rests*
- *Some individual seating*
- *Intimate seating areas at right angles to one another*
 - *facilitates comfortable communication*

Seating designed for sociability



- Comfortable seating has arms and full back support.
- Moveable or fixed right-angle seating makes conversation easier.

Strolling and sitting and access within and around the site 5

- *Some moveable outdoor seating*
- *Limit non-resident use of the site as short-cut*
 - *Substantial barrier*
 - *At least one legitimate short-cut (that does not violate resident territory)*
- *Parking areas do not block entrances to natural pedestrian pathways*

Strolling and sitting and access within and around the site 6

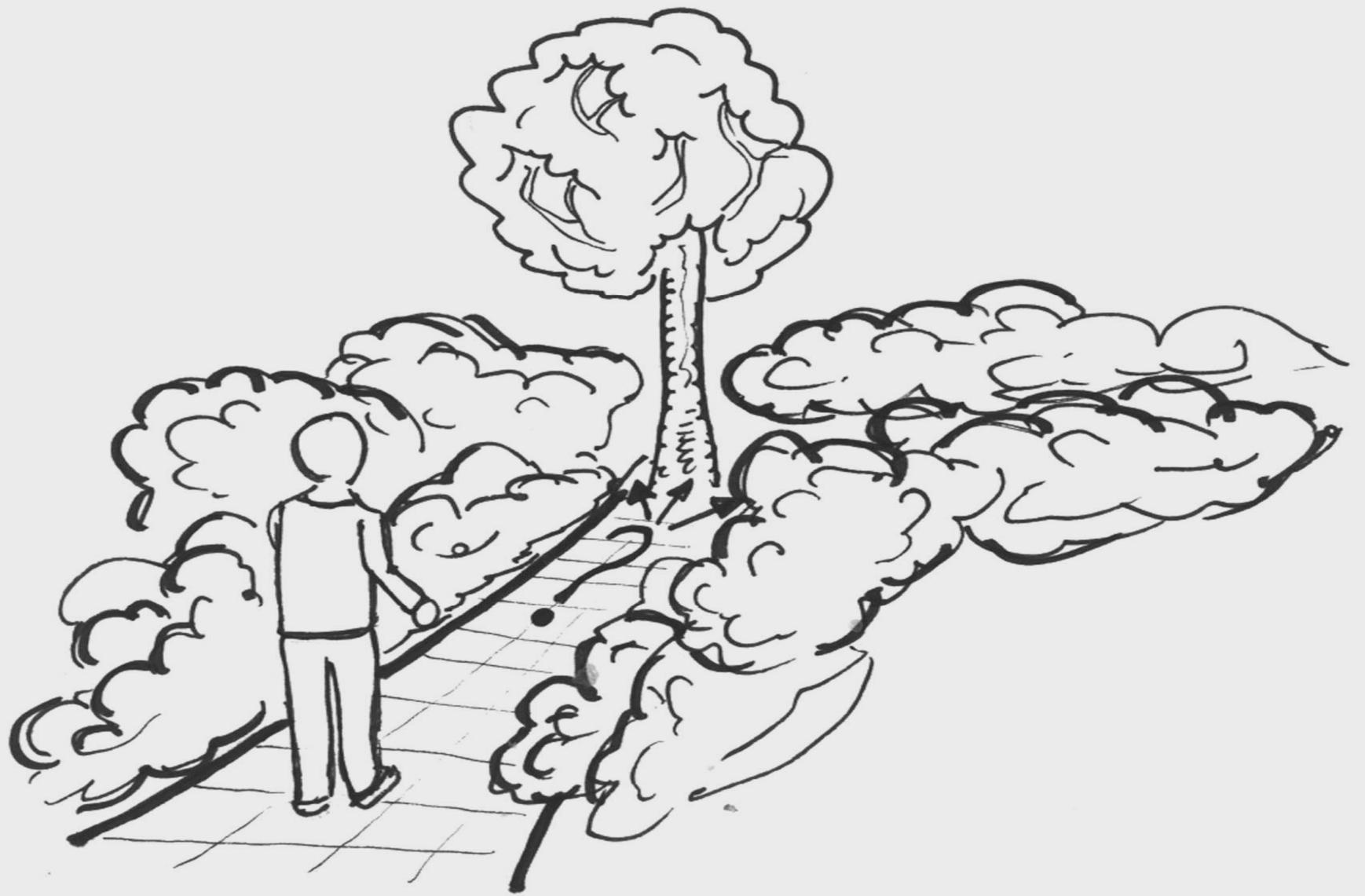
- *Path intersections to cope with greater concentration of traffic and socialising*
 - *Locate games areas along pathways*
- *Light paths evenly to encourage evening use*
- *Path width allows two wheelchairs to pass with ease*

Strolling and sitting and access within and around the site 7

- *All pathways comply with AS1428*
- *Footpaths to accommodate predictable types and volumes of pedestrian traffic*
- *One major pathway connects most units with major on and off-site activities*

Strolling and sitting and access within and around the site 8

- *Consider using well-drained, even-surfaced ramps and grades, rather than steps*
 - *Handrails along steep sections*
- *Landmarks, mark entrances*
- *Differentiate clearly between paths at front and back of dwellings and between 'public' and 'resident-only' paths*
 - *avoids confusion*



Simple path systems that offer choices for exploration

Strolling and sitting and access within and around the site 9

- *Paths directionally simple but allow for choice of route*
- *Locate paths so no population group has to violate the temporary territory of another while moving around the site*
 - *Paths should go 'to-but-not-through-areas'*

Strolling and sitting and access within and around the site 10

- *Avoid hazards like bark and leaves on paths*
 - *All paths have edges to keep landscaping off*
- *Avoid tan bark landscaping*
- *Hard-surface pedestrian paths*

Safety and security

- *Older years a particularly vulnerable time, physically and psychologically*
- *Failing eyesight and reduced physical strength cause feelings of vulnerability*
- *Physical and psychological supports: security, orientation and control important to reduce crime*
- *Older people easy targets for crimes against person and property*

Safety and security

- *Older people often fearful because of reduced levels of physical and mental acuity*
- *Personal accidents and medical emergencies are common*

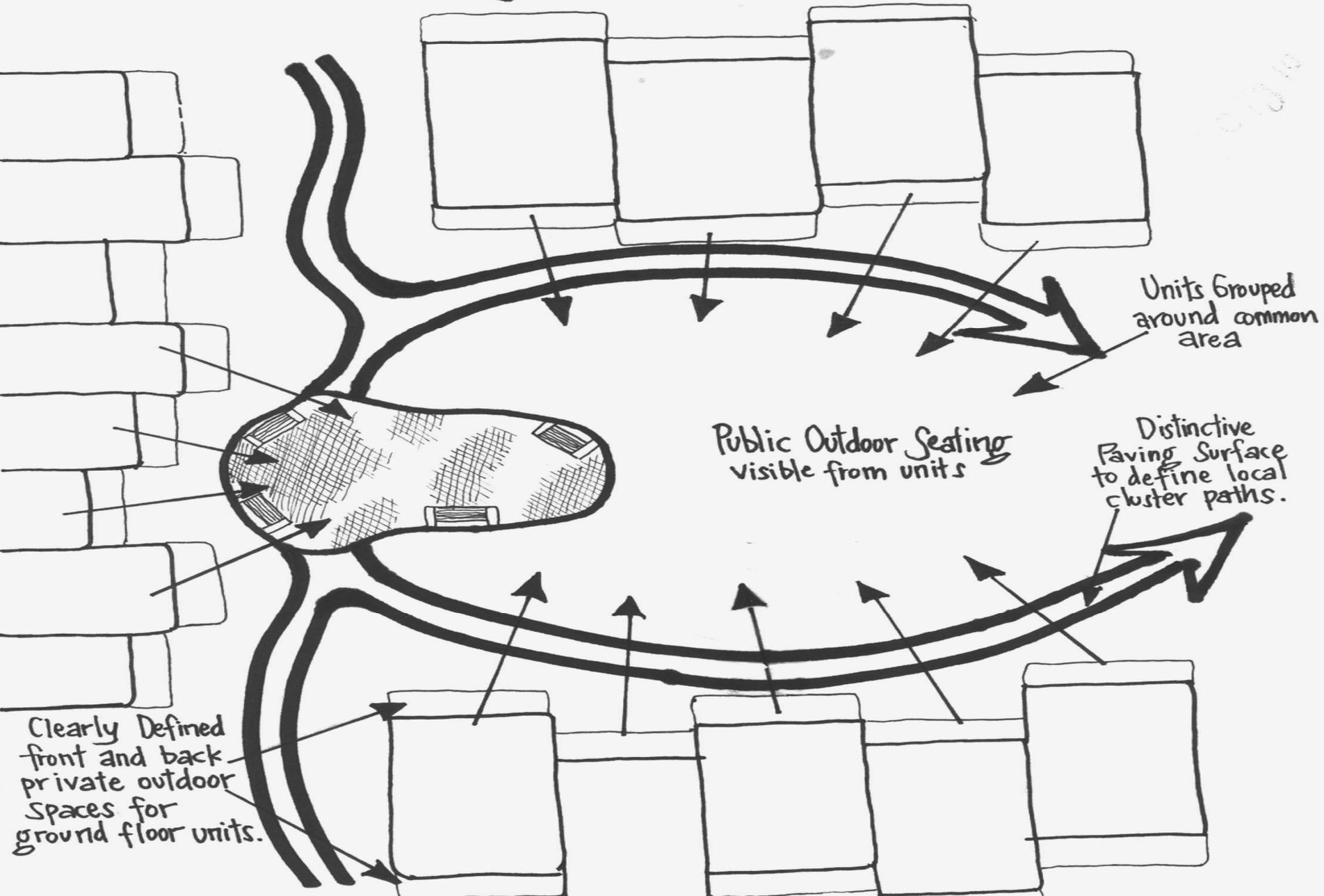
To foster safety and security 1:

- *Minimise entries onto site*
- *Limit number of units or dwellings people pass on the way to a back door likely to be used as an interior short cut to parking, shops, bus stops, and train station*
- *Path from parking space, train or bus to dwelling is short, direct and visible from units*

To foster safety and security 2

- *Promote natural surveillance and visibility of open space*
- *Residents do not have to walk past parked cars or areas of low natural surveillance on the way to units*
- *See who is there before opening the door*
 - *windows overlooking entry, peepholes at convenient height*

Visibility Of Open Space



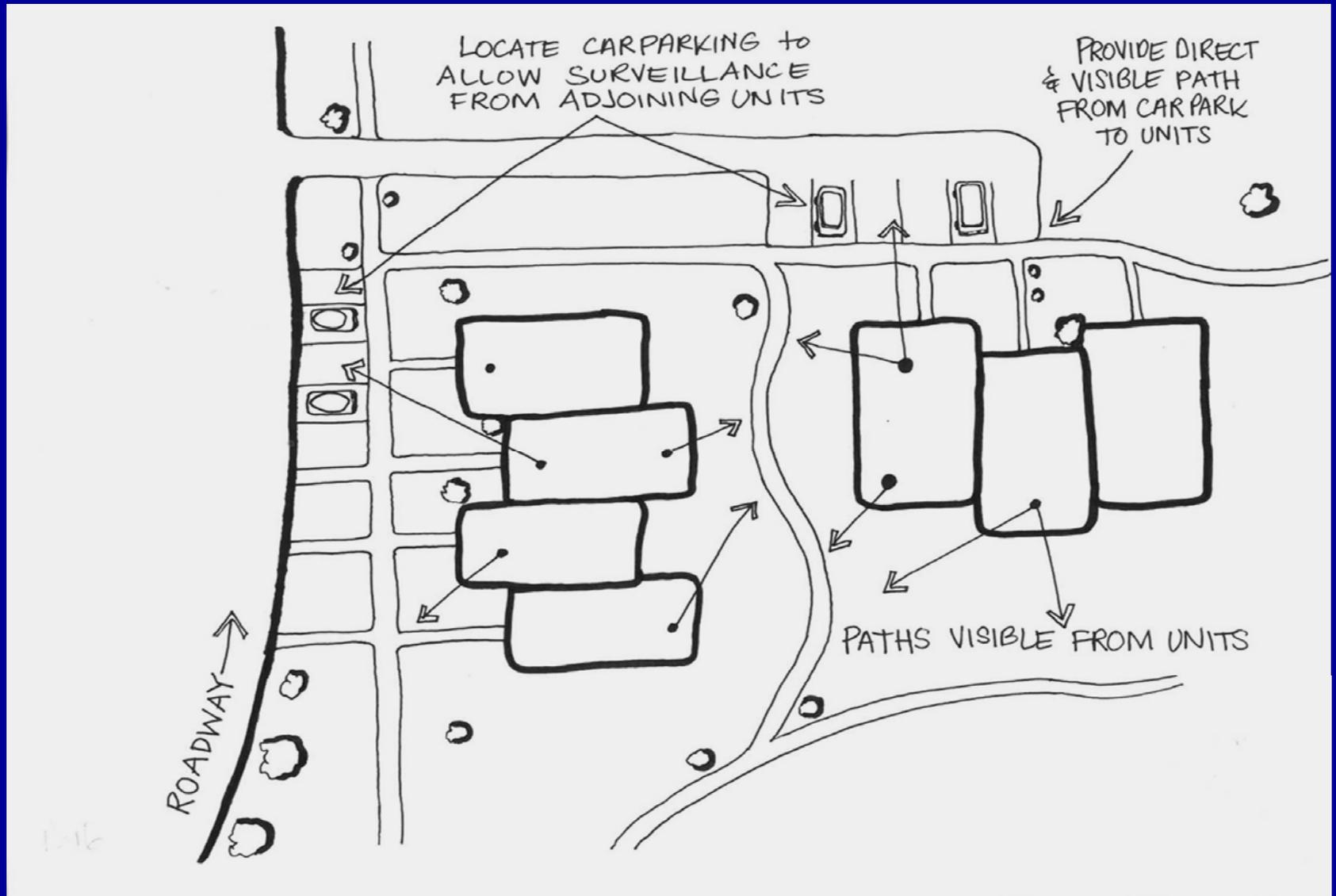
To foster safety and security 3

- *Management office in central, visible point*
 - *Facilitates surveillance*
- *Social rooms near heavily used areas*
- *Entries located to enhance surveillance from units and open space*

To foster safety and security 4

- *Eliminate opportunities for casual short-cutting, especially by young people*
- *Clear vehicular and pedestrian access routes*
- *Well-lit pedestrian route unobscured by planting*
- *Focus pedestrian movement along a well-used route*

Natural surveillance of car parks and paths



To foster safety and security 5

- *Discourage intrusion by strangers or young people into areas for residents' only use*
 - *Real or symbolic barriers, eg, low fences, hedges, a change in hard-surface material or landscaping*
- *Direct access to buildings from all parking areas, local streets and public transport*
- *Parking places in a protected place, with surveillance from units and community spaces*

To foster safety and security 6:

- Real or symbolic barriers to discourage intrusion by strangers into common or shared landscaped spaces for residents only*
- Well-lit entrance-ways, located for night-time use, with no places for people to hide*
- Site entries narrow enough to appear 'private', while not creating a place for an intruder to hide*
- Facilities planned for equitable access*

An accessible water fountain



Pedestrian segregation and traffic management

- *Many older people will stay indoors rather than take chances with outdoor hazards, e.g., vehicular traffic*
- *Minimum walking speed for most fairly able ambulatory older people is much slower than for wider population*
- *Older people not able to cross intersections quickly*

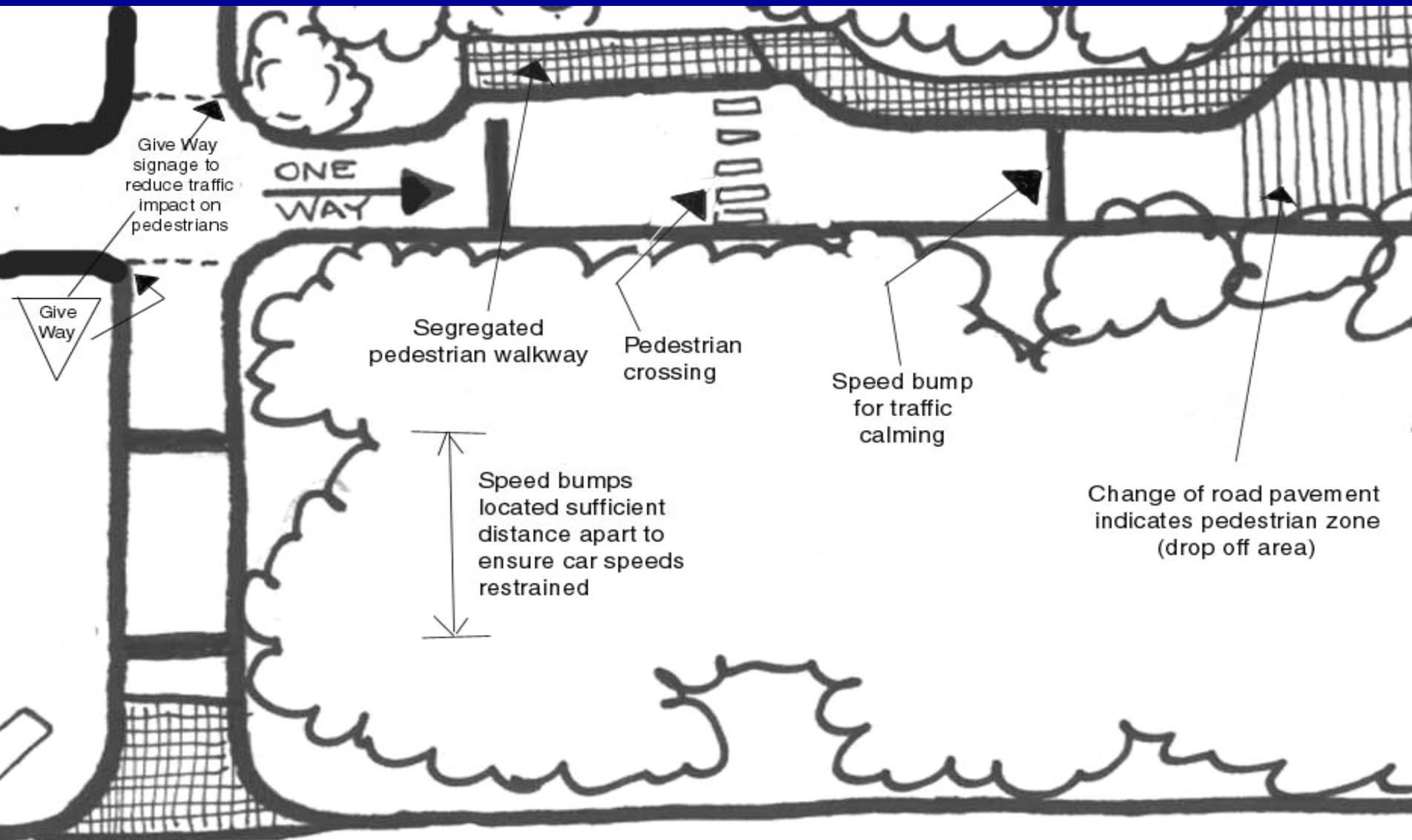
Pedestrian segregation and traffic management 1:

- *Traffic management protect residents from moving vehicles where vehicular segregation is neither possible nor appropriate*
- *Avoid dangerous crossings from site to bus or train station*
- *Avoid narrow roadways and cul-de-sacs*
- *Limit speed by humps, no more than 40m apart, no sharp bends, narrowed roadway*

Pedestrian segregation and traffic management 2:

- *Limit length of straight stretches*
- *Avoid long sight lines*
- *'Home-like' quality of road design appears different from surrounding residential streets*
- *Do not permit vehicles too close to street-facing dwellings (Dutch minimum: 9.6m)*
- *Low-glare street lighting, especially at 'danger' points*

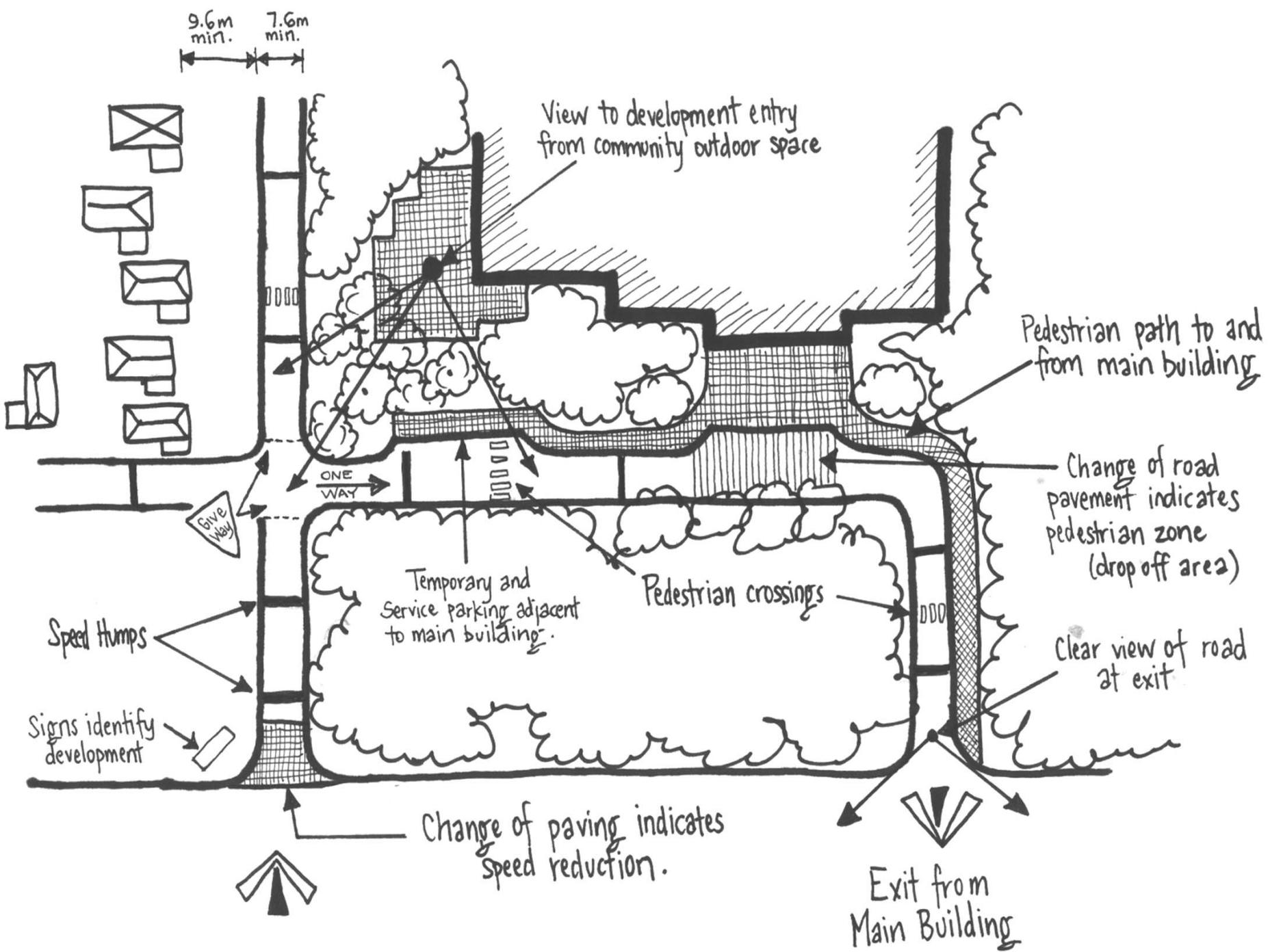
Traffic management for pedestrian safety



NOTE: See Next Figure for full scale development plan from which this has been extracted

Vehicular access to and within the site

*This section examines the
requirements of vehicular
access to and within the site's
open spaces*



Vehicular access to and within the site 1:

- *Safe and comfortable waiting, pick up, and drop-off areas*
 - *Older people often depend on others to drive them around*
- *Vehicular access to the site is safe and convenient, well-lit and suitable for day and evening use*
- *Drop-off, pick-up and waiting areas easily accessible to older people*

Vehicular access to and within the site 2:

- *Locate near and connect to clusters of dwellings by pathways*
- *Opportunities for residents in shared areas and individual units to watch other residents and visitors come and go*
- *Appropriate signage and vehicular control measures such as 'go slow' signs, road surface changes'*
 - *Speed bumps spaced no more than 40m apart*

Vehicular access to and within the site 3:

- Control vehicular flow to protect older people and pedestrians*
- Vehicle access through the site consists of one continuous, 'legible' route without steep gradients or sharp turns*
- Limit length of straight stretches to deter speeding*
- Low-glare lighting at danger points*

Parking provision, location and design

- *Parking designed to allow easy circulation and prevents confusion*
- *Specific provision will depend on requirements of Town of Victoria Park*

Parking provision, location and design for older people 1:

- *Locate parking areas for easy circulation, ease of access and prevent confusion*
- *Place parking areas as close to each unit as possible*
 - *In several small areas rather than one large parking lot*
- *Carports clearly associated with each cluster of units*

Parking provision, location and design for older people 2:

- Locate parking so cars do not dominate views from units but still permit natural surveillance from units*
- clearly marked wider spaces for residents who use wheelchairs and design vehicle-free paths from all parking areas for people in wheelchairs*
- adequate parking provision for residents, staff and visitors*

Parking provision, location and design for older people 3:

- Relate parking provision to local car ownership rates, local public transport patterns, access to shopping and residents' economic profile*
- adequate sign-posted parking spaces for people with a physical disability (AS1428)*
- clearly signposted visitor parking, close to building entrance and in first parking areas visitors pass when arriving*
- approximately one additional space for every twenty dwelling units for parking caravans, trailers and boats*



For my Dad



Training with Care, 2003

the end...

