

CHRIS AND SALLY'S HOUSE

DEMENTIA

DEMONSTRATION PROJECT

BRE WATFORD

Design for Dementia

Presentation by Bill Halsall

8th December, 2020

CHRIS & SALLY'S HOUSE

BILL HALSALL

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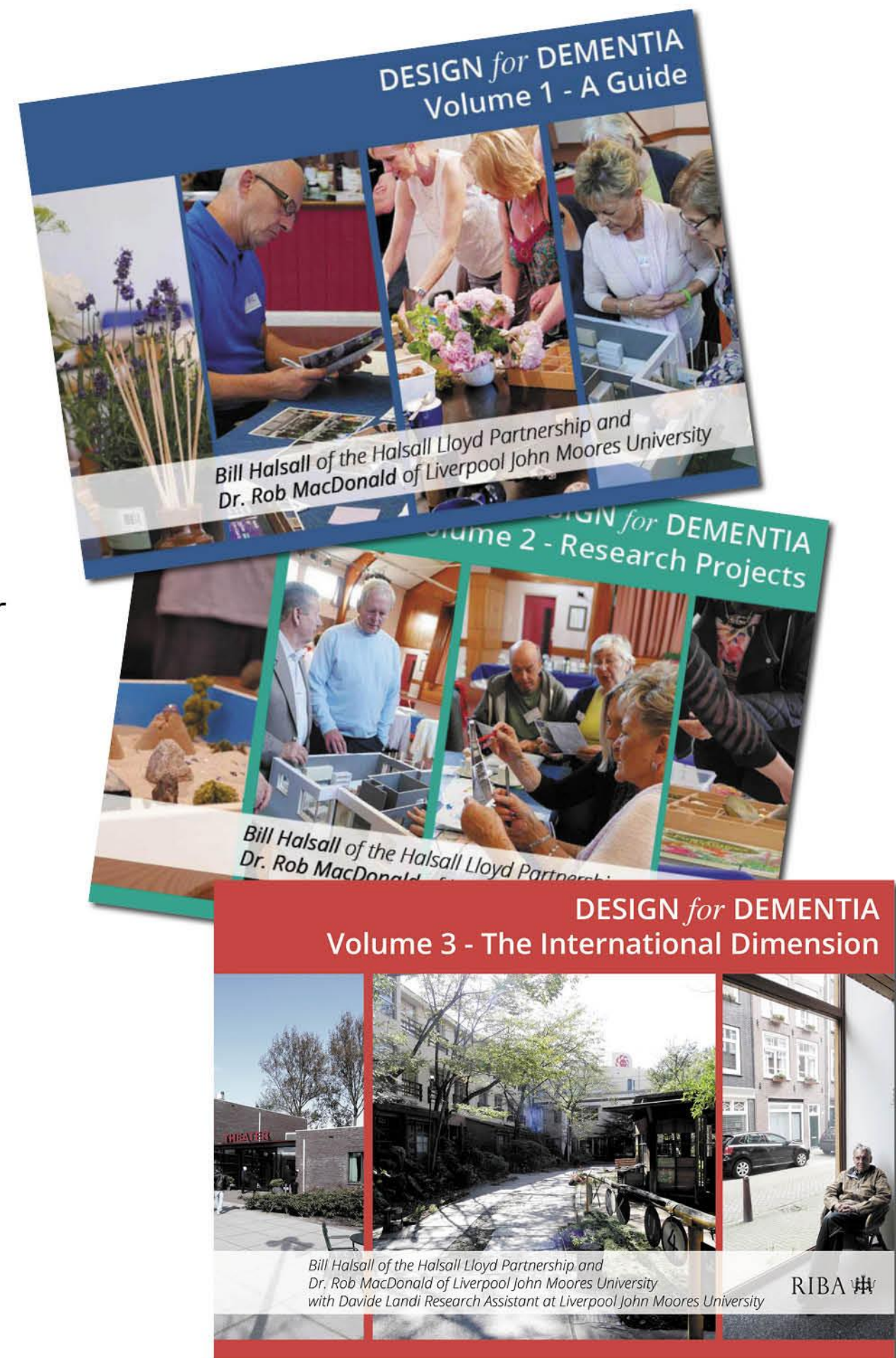
Architect & Landscape Architect

Halsall Lloyd Partnership

Bill Halsall is an architect, landscape architect and senior partner of Halsall Lloyd Partnership. He has promoted sustainable communities and neighbourhoods throughout his career, generating design through participation.

He recently co-authored 'Design for Dementia'. A design guide which aims to tackle the challenge of dementia through the design of the interior and exterior environment.

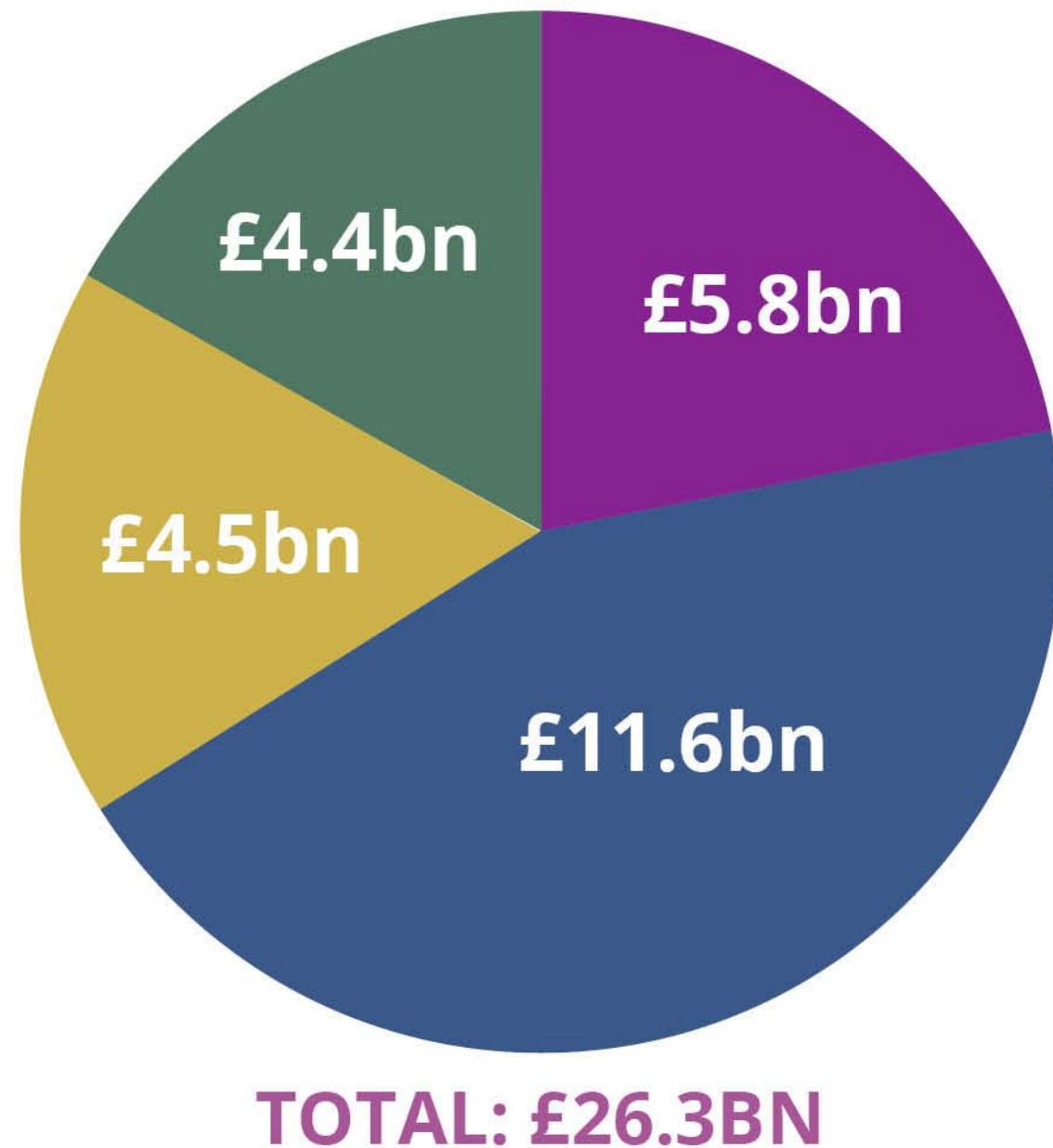
Bill is the architect of Chris & Sally's House at the BRE Innovation Park, Watford.



CHRIS & SALLY'S HOUSE

THE COST OF DEMENTIA IN THE UK

- Privately Funded Social Care
- Care Provided Directly by Families
- Publicly Funded Social Care (NHS)
- Diagnoses, Other and Healthcare Costs



- The number of people over 60 is due to increase by 2 million over the next 25 years
- 850,000 people live with dementia in the UK today
- This is projected to rise to 2 million by 2051
- 1 in 14 people in the UK live with dementia
- Although dementia is associated with aging, an estimated 40,000 people have early onset dementia
- The Department of Health estimates that only 59% of people living with dementia have a full diagnosis. Therefore, the statistics may significantly understate the scale of the problem.

Source: Alzheimer's Society

The global impact of dementia

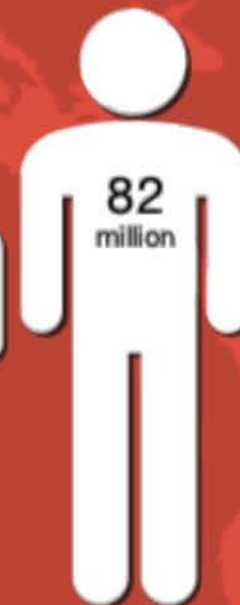


Around the world,
there will be one new case
of dementia
**every
3 seconds**

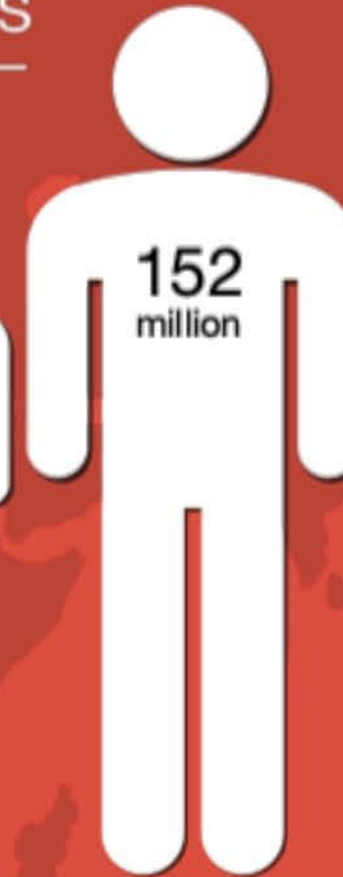
50 million people worldwide are
living with dementia in 2018.
This number will more than
**triple to 152
million by 2050**



2018



2030



2050



2018



2030

The total estimated
worldwide cost of dementia
in 2018 is US\$1 trillion.
This figure will rise to
**US\$ 2 trillion
by 2030**



The Experience of Dementia

How can we respond as designers?

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AGEING IN PLACE - DESIGN FOR DEMENTIA

THE ISSUES

- 70-80% of people living with dementia continue to live in their own homes
- They live in the same neighbourhoods and use the same facilities and centres
- Design for Dementia can help people living in their own homes to sustain their capacity for longer and maintain their quality of life as members of the community
- 'Design for Dementia' by Bill Halsall and Dr. Rob MacDonald tackles the design issues presented by dementia.



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RESEARCH - DESIGN PARTICIPATION

Design principles to assist people living with dementia are developed through engagement as well as research.

DAA group members
participating in the design
of the 'Design for Dementia' Home.



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LIVING LAB - DESIGN PARTICIPATION



'Living Lab'
*DAA group members using
photo cue cards.*

**'Living Lab' approach forms the basis of
engagement with people living with dementia.**

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ENGAGING THE DEMENTIA COMMUNITY

Bill has been exploring the potential use of the 'Jungian Sandtray' as a vehicle for engagement, enabling group participation including people with dementia (HLP have long experience using hands-on modeling as a design participation technique).

OBJECTIVES

- Explore the use of the 'Jungian Sandplay' as a method for stimulating engagement, communication and participation, involving people living with dementia

METHOD

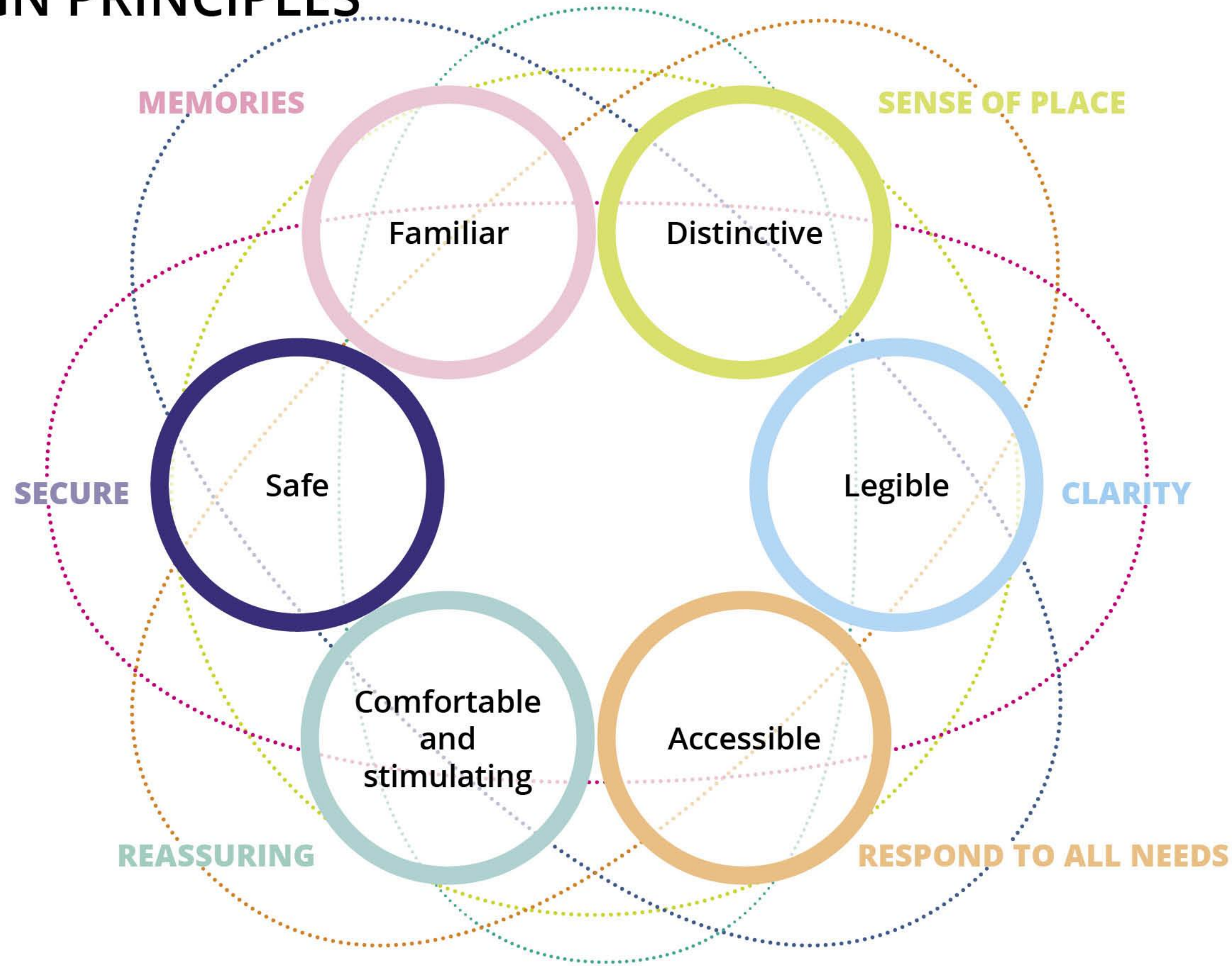
- Stimulate all the senses
- Promote 'play' and relaxation
- Evoke memory.



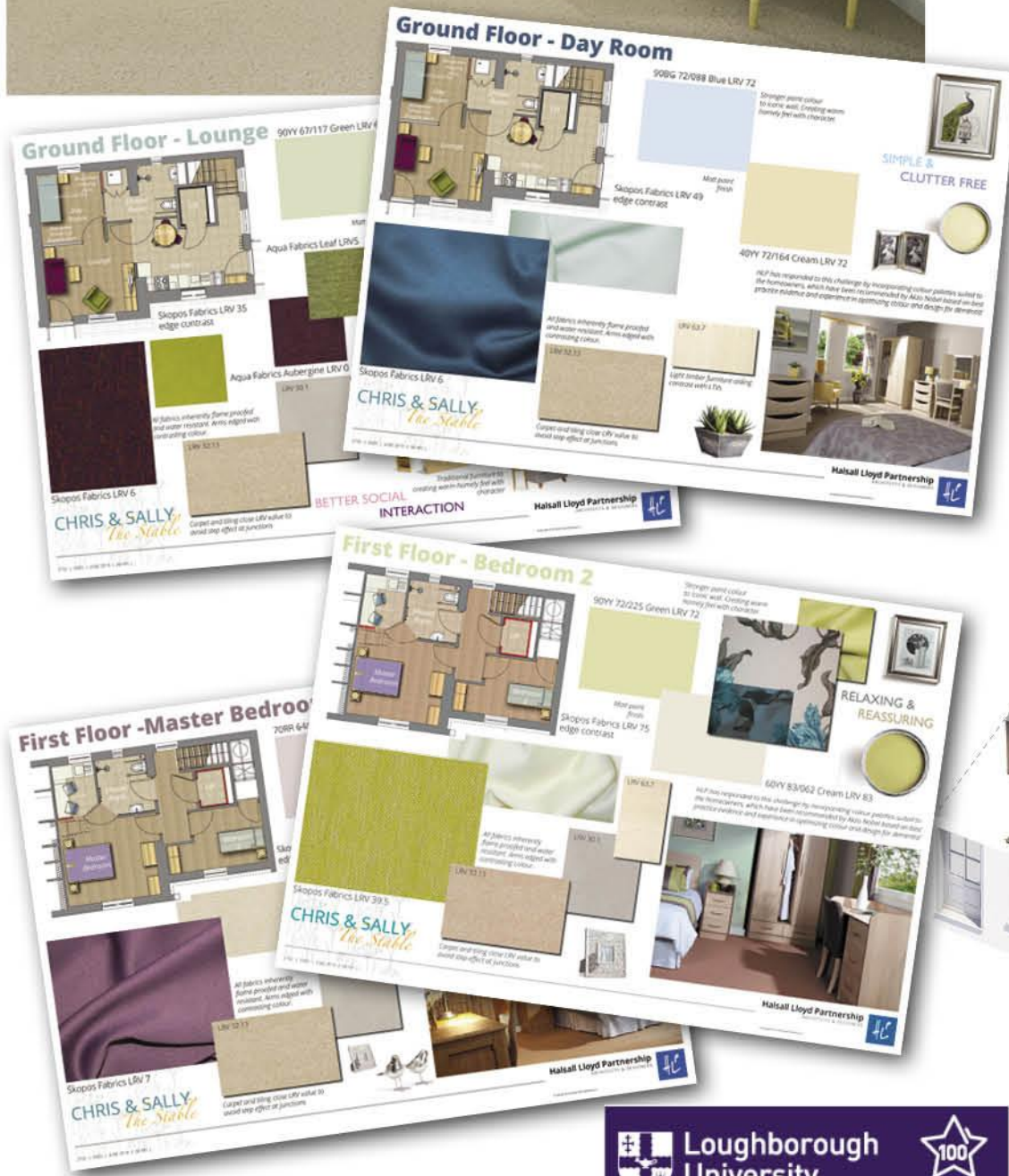


CHRIS & SALLY'S HOUSE

KEY DESIGN PRINCIPLES



CHRIS & SALLY'S HOUSE



Chris and Sally's house is a demonstration project designed by Halsall Lloyd Partnership and recently completed at the Building Research Establishment's Innovation Park in Watford. The project sets out to demonstrate how Chris and Sally's house, imagined as an old terraced house, can be redesigned to accommodate their needs and aspirations and to assist them to 'age in place' through their later years.

Chris and Sally are personas developed by Loughborough University. The personas including Chris and Sally, embody classic combinations of physical and cognitive impairments.

The demonstration project illustrates how a design response can assist people living with dementia to continue to live in their own homes sustaining their capacity for longer as members of the community.

The design solutions proposed are based on evidence and research carried out by a partnership between the BRE, HLP and Loughborough University.

CHRIS & SALLY'S HOUSE

- A DEMONSTRATION PROJECT – how can design help people 'Living with Dementia' to retain their capacity and to live safely and comfortably in their own homes for longer?
- A RESEARCH PLATFORM – to carry out ongoing evidence based research into 'Living with Dementia'
- A LEARNING TOOL – to assist people 'Living with Dementia', their carers, developers and institutions in the care, health and housing sectors to understand how new housing design can be improved to cater for 'ageing in place'.

CHRIS & SALLY'S HOUSE



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EXISTING TWO UP, TWO DOWN COTTAGE

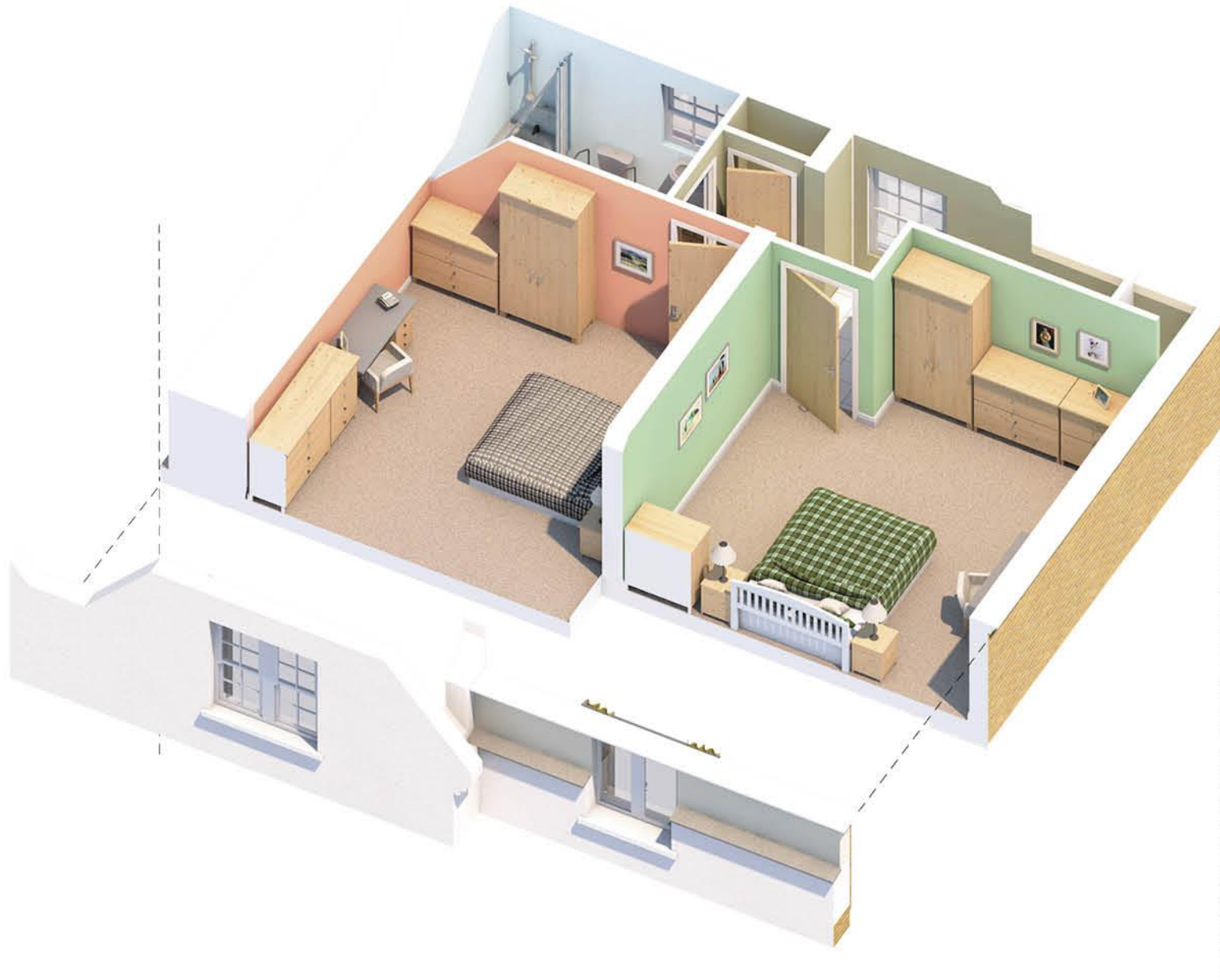


GROUND FLOOR

- The only bathroom is upstairs - incontinence issues
- Bath is hard to get in and out of
- Stairs are a struggle
- Views of the garden are poor
- Access to the garden is difficult
- Thresholds are not easy to cross in a wheelchair
- Lighting levels are not adequate (natural or artificial)
- Ventilation is poor - windows are hard to open
- On a sunny day there is glare and overheating
- There is restricted headroom at first floor.

CHRIS & SALLY'S HOUSE

EXISTING TWO UP, TWO DOWN COTTAGE



FIRST FLOOR

- The only bathroom is upstairs - incontinence issues
- Bath is hard to get in and out of
- Stairs are a struggle
- Views of the garden are poor
- Access to the garden is difficult
- Thresholds are not easy to cross in a wheelchair
- Lighting levels are not adequate (natural or artificial)
- Ventilation is poor - windows are hard to open
- On a sunny day there is glare and overheating
- There is restricted headroom at first floor.

CHRIS & SALLY'S HOUSE

PROPOSED INTERVENTIONS



GROUND FLOOR

- Main bedroom and adjoining shower room to wheelchair standards with a hoist and view from bed to wc
- Wheelchair accessible lift
- Kitchenette for food and drink preparation/medication
- Carers bedroom
- New manual and automatic opening windows
- Open plan living/kitchen dining space
- Dayroom/dining room/quiet room
- Shower room downstairs with hoist access from dayroom.
- Living room with view to wc
- Walkability as well as wheelchair access
- 'View to Green'
- Light reflectance values differentiate between walls/floors/furniture
- Floors finishes have consistent light reflectance values avoiding trip hazards
- Thresholds are wheelchair accessible.

CHRIS & SALLY'S HOUSE

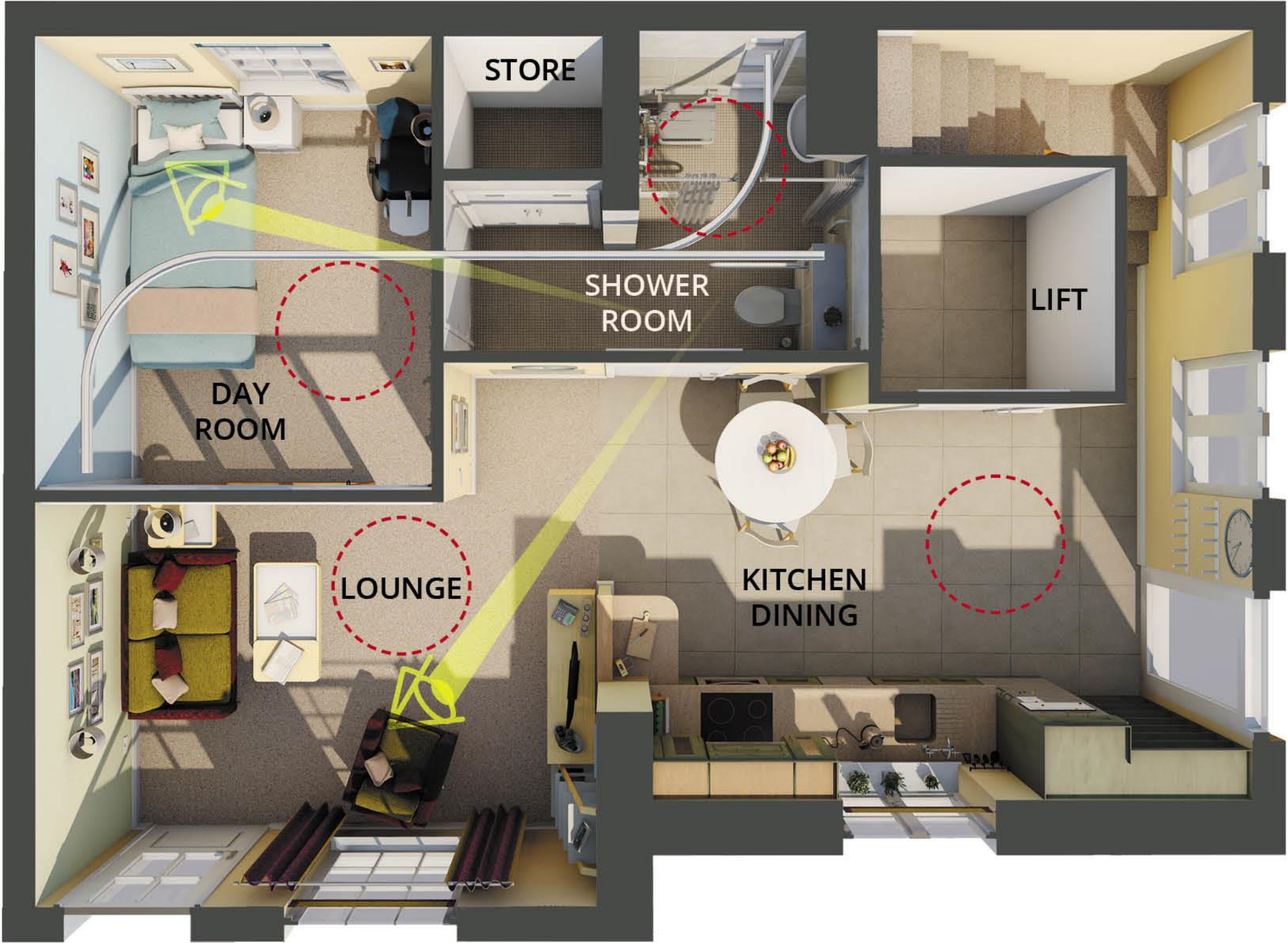
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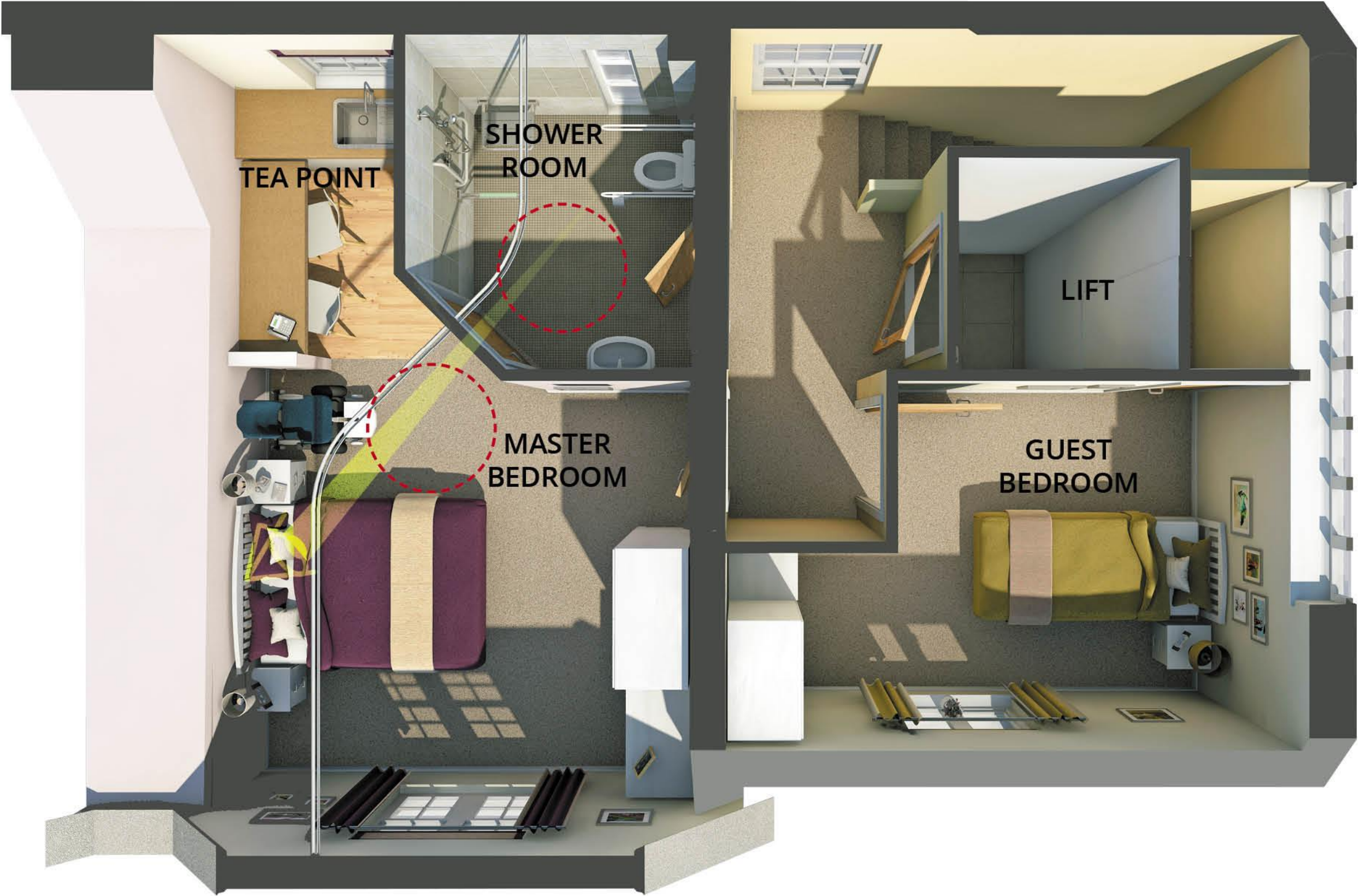
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FINAL LAYOUT GROUND FLOOR

CHRIS & SALLY'S HOUSE



FINAL LAYOUT FIRST FLOOR

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KITCHEN/DINING



- Open plan arrangement
- Legibility between rooms
- Easy access to WC and shower room with good visibility for orientation
- Lift access to first floor, to accommodate wheelchair plus carer
- Minimising doors
- 'Walkability' as well as wheelchair access
- Kitchen with glass doors and drawers for visibility of kitchen equipment
- High and low-level work surfaces
- Rounded corners to minimise risks from falls
- 'View to Green' – good aspect
- Good natural and artificial light
- Tonal contrast between floor, walls, door, kitchen unit fronts and worktops based on approximately 30% difference in light reflectance values
- 'Personalisation' and 'memories' to make it feel like a home.

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LOUNGE



- 'Walkability'
- 'View to Green'
- Visibility to the WC
- Open plan with visibility to kitchen and entrances
- Tonal contrast between walls, floor and furniture
- Curtains with highlighted edge for ease of use
- High level of ambient and task lighting
- Accessible and visible storage
- Rounded corners to reduce risk of falls

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DAYROOM



- Alternative uses: dining room, quiet room or day room for end of life care
- 'View to Green' with blackout blinds
- Hoist to shower room
- Pocket door between day room and shower room for flexibility between alternative uses
- Multiple wheelchair charging positions

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SHOWER ROOM



- Wheelchair accessible
- Wet area for shower
- Non-slip floor
- Hoist to shower and toilet
- Tonal contrasts between floor, walls, grabrails, seat
- Wash down surfaces for ease of cleaning
- Storage with washer/drier
- Pocket door to the dining/day room
- Shower curtains with magnetic closing
- Retractable seat in shower enclosure

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MASTER BEDROOM



- Fully wheelchair accessible
- 'View to Green'
- Hoist to shower room
- Curtains and blackout blinds
- Wheelchair charging position
- Ambient and task lighting
- Adjoining kitchenette area – for preparation of light meals and drinks and storage of medication

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BEDROOM 2



- Respite for carer
- 'View to Green'
- Blackout blinds
- Tonal contrasts for easy visibility
- Wheelchair adaptable

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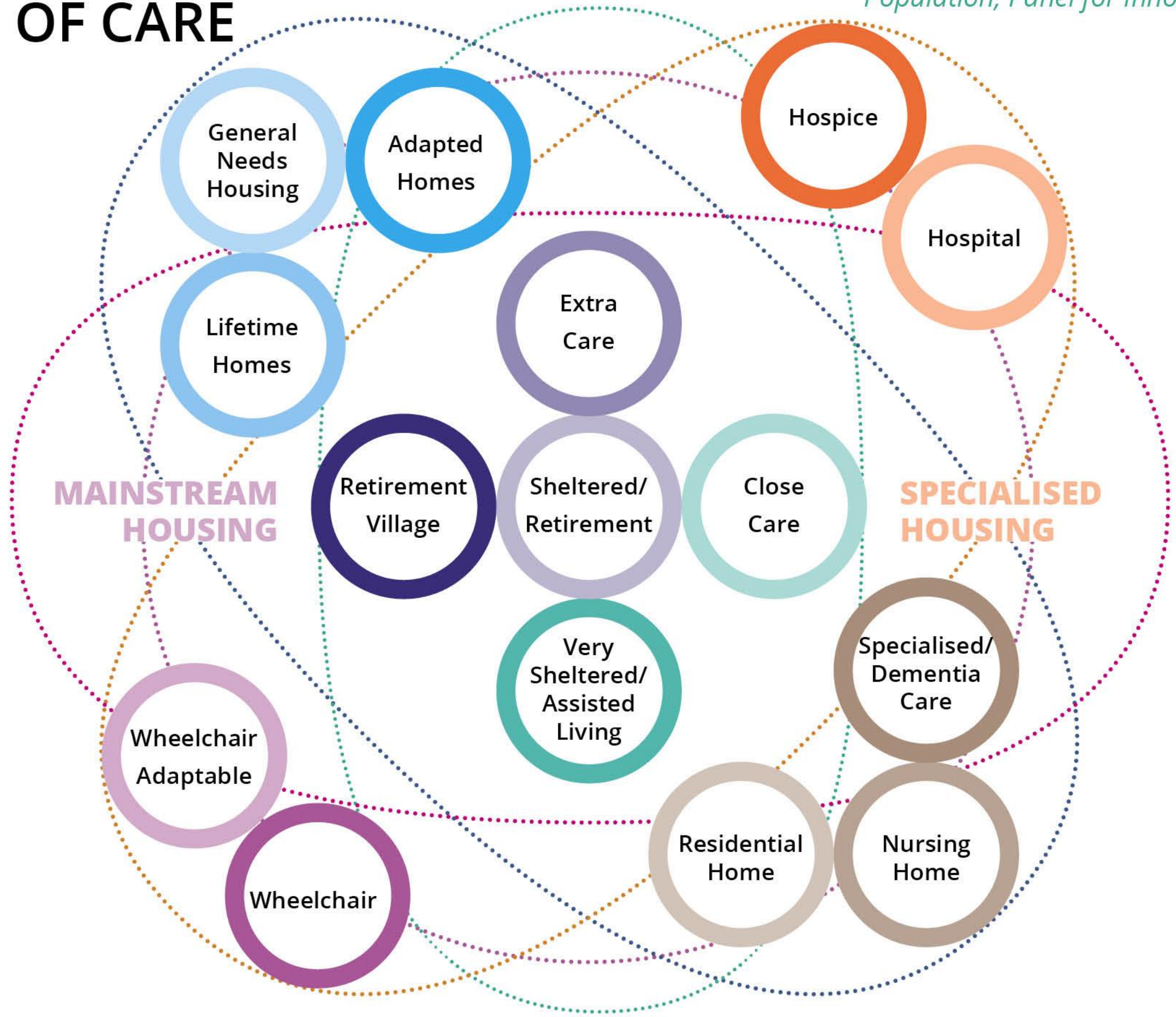
DESIGN FOR DEMENTIA – CONCLUSIONS

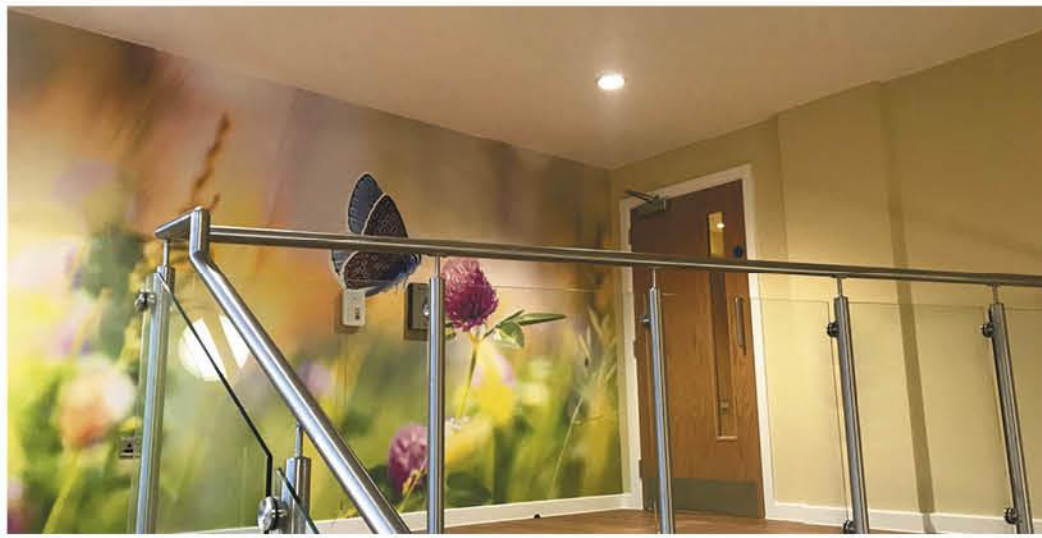
- Design for dementia can help people living with dementia to sustain their capacity and live comfortably in their own homes for longer
- Engage with people living with dementia to better understand their needs and aspirations
- The design principles apply to new build as well as refurbishment
- Design for dementia includes neighbourhoods, public spaces and public buildings
- Housing, social and health care policies should support this alternative approach to providing elderly care for the benefit of families and communities as part of an integrated approach to 'ageing in place'.

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SPECTRUM OF CARE

Based on the HAPPI report. Housing Our Aging Population; Panel for Innovation, refer to page 7.8.





PEACHMENT PLACE, BURY



Halsall Lloyd Partnership
ARCHITECTS & DESIGNERS



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NEW LODGE, NEW EARSWICK, YORK



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ARCHITECTS & DESIGNERS



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AWARDS:
Highly Commended in Best Regeneration
Project - National Housing Awards 2019



THE WELSH STREETS, LIVERPOOL



DISTINGTON, CUMBRIA



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LITTLE LANE, WIGAN



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THANK YOU

Any questions?