

Wellbeing at Home

A study of the process and outcomes of home adaptations and reflections for future practice.



Tel: 0208 941 5161
Website: www.archadia.co.uk
Email: archadia@archadia.co.uk
Twitter: @ArchadiaArch

RIBA 
 Chartered Practice

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“There is strong evidence that minor home adaptations are an effective and cost-effective intervention for preventing falls and injuries, improving performance of everyday activities and improving mental health. Major adaptations have been less extensively studied, but the evidence shows that they can also support people in achieving these outcomes in some circumstances.”

Room to improve: The role of home adaptations in improving later life, Centre for Ageing Better, November 2017

Foreword

You can tell when a home adaptation has been well designed. It becomes more than a sum of its parts - a space that a disabled person can use and, just as importantly, wants to use. Yet, the designs for home adaptations are often criticised for looking more like a hospital than a home.

I started my career in an Architect's section of a local authority and spent many years draughting home adaptation schemes on a large antique drawing board. On reflection, many of the schemes I produced were similarly old fashioned so I was very pleased to meet Archadia Architects and hear their passion for improving the understanding of design principles.

This study looks at both the design process and the end product through the eyes of an Architect. How you take an initial brief from an Occupational Therapist and work with the family and other professionals to devise a scheme that works, not just now but for the long term. How good design is so essential to a sense of wellbeing.

Most adaptations involve reconfiguring existing space, which can limit the available options and usually is considered in two dimensions. Three of the studies here show the added complexity of creating new space, including additional regulations and the challenge of thinking in three dimensions - something an Architect is trained to do.

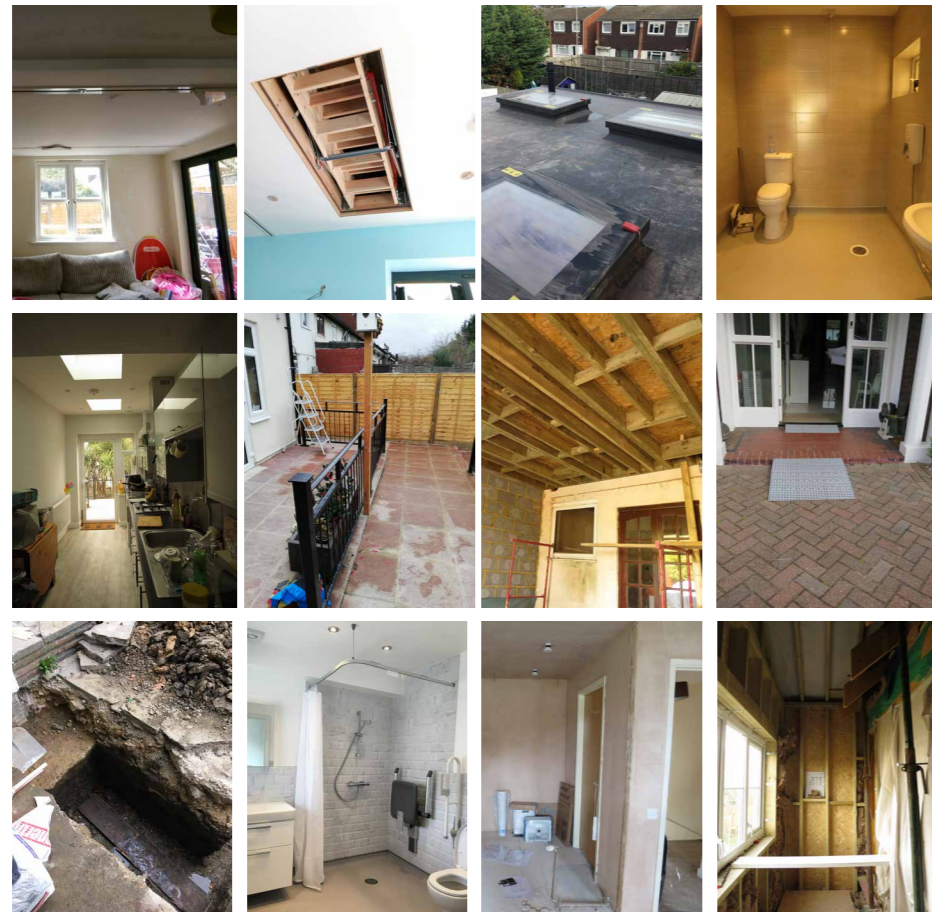
This is recommended reading for Occupational Therapists, Grants Officers and Technical Officers charged with delivering home adaptation projects.

*Paul Smith
Director
Foundations*



Archadia have been involved in designing for many different types of disability looking at the use a materials and technology to create spaces that feel like home.

Contents



Archadia have a vast experience taking projects from concept to completion. We focus on inclusive design looking at how we can create environments fit for all occupants and users.

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Introduction

More than 90% of older people in England live in mainstream housing, as opposed to specialist housing or residential care. Most of these homes will not meet people's needs as they age yet many people prefer to stay at home and within their community for as long as possible. The UK governments Disability Facilities Grant (DFG) provides funding to adapt older and disabled people's homes to help address this problem. There is a growing body of evidence that suggests that these interventions can reduce admittance to hospital and improve people's health and wellbeing. Currently the research and case studies that reflect on the design process and delivery of these projects is limited.

This report captures the process and final outcomes of several major home adaptations undertaken by Archadia Chartered Architects working closely with a South West London Council over the last three years. Each project follows a collaborative design and construction process intended to react to the client's specific disabilities and needs and aims to understand and improve the wellbeing of the people at home. The report also reflects on the experience of the stakeholders involved throughout the process and the wider factors which can contribute to a project's success.

Section one of the report presents different types and scale of home adaptation considering how this relates to planning and building regulations.

Section two introduces a holistic design approach developed by Archadia that puts wellbeing at the centre of the home experience and recognizes the interconnected nature of interventions with other social factors.

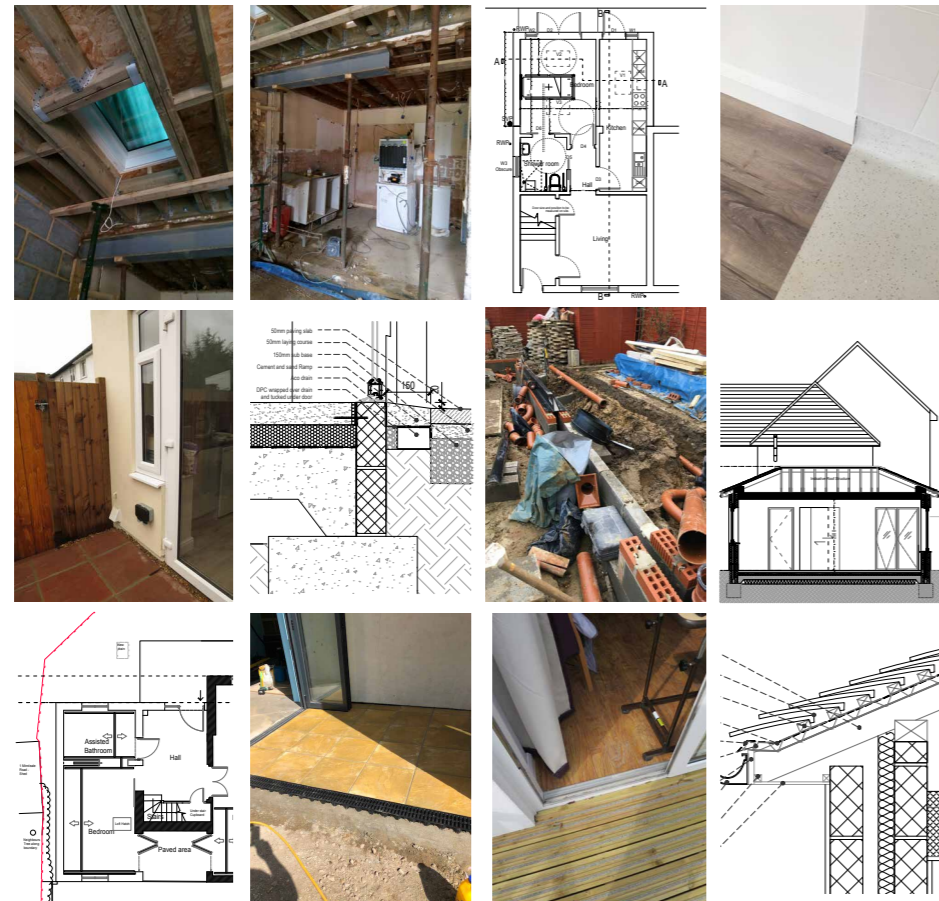
Section three explores the wider process, and experience of stakeholders including; the end users, families, carers, council officers, occupational therapists, contractors and architect.

Section four consists of four different case studies, highlighting the different types of interventions and evaluating the opportunities and key issues in each context.

Section five outlines some of the findings from feedback received from different stakeholders.

Section six provides a final reflection on the social value of these projects and will consider what can be learnt from this inclusive small-scale process to inform better practice in design approaches and more innovation in the sector.

This report hopes to contribute to the ongoing dialogue about the positive impact that home adaptations can have on people, their families and carers while also acknowledging the complexity of managing the building process, public spending and working with vulnerable clients. It is hoped that it will be used by both practitioners for solid examples of larger scale adaptations in different typologies, as well as a reference for families or people who are trying to navigate the process of adapting a home to better meet their needs.



Managing each stage of the process creates many opportunities and unexpected issues can arise. Working collaboratively with all involved helps to reduce stress on site and meet the requirements of the user throughout the project.

Types of Adaptations

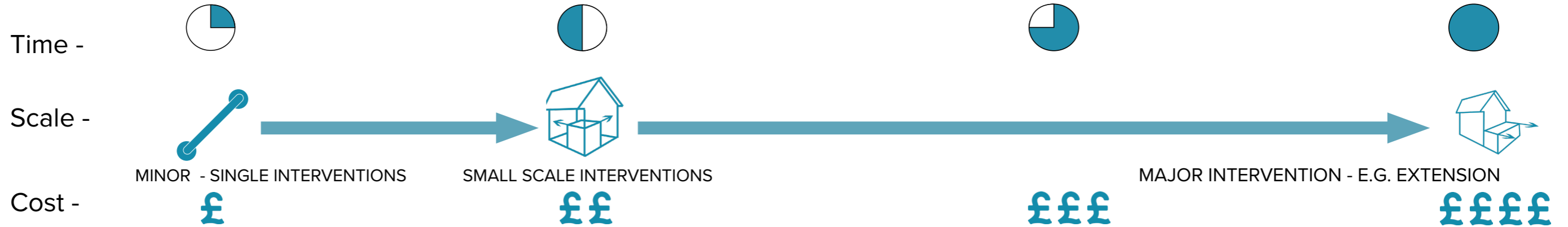
Administered by councils and clinical commissioning groups through the Better Care Fund (agreed locally by Health and Well-being boards and jointly signed off by), the UK government's Disability Facilities Grant (DFG) provides Funding to adapt older and disabled people's homes addressing issues related to health risks and accessibility; these are classed as minor or major adaptations depending on the scope and budget.

The diagram below describes the different scales of adaptations from a single intervention like a grab rail (minor) to a larger extension (major) which might incorporate several different interventions. As the scale of the adaptation increase there are other factors which must be considered such as planning and building control, the scale will also affect the cost of the project and the time it will take to complete. When working on existing buildings there is often

hidden factors such as poor building fabric or structural conditions that could be uncovered as part of the project leading to increased cost and time on site.

Architects such as Archadia would generally be involved in remodelling or extending a home rather than a minor adaptation as this can usually be managed by a local handy-person, a surveyor, Occupational

Therapist (OT) and small contractor. The benefit of larger adaptations with multiple interventions is that a home can be future-proofed to cater for needs changing over time and offer a design-led process to achieving these changes.



DEFINITIONS:

WHAT IS PLANNING PERMISSION?
Official permission that you must get from the local authority before building something new or adding something to an existing building.

WHAT IS BUILDING CONTROL?
Building Control Services ensures that buildings are designed and constructed in accordance current Building Regulations and regulation requirements.

WHAT IS THE PARTY WALL ACT?
It provides a framework for preventing and resolving disputes in relation to party walls, boundary walls and excavations near neighbouring buildings.

NO PLANNING CONSENT

You should not need to apply for planning permission for small internal interventions including building or removing an internal wall. If you live in a listed building, however, you will need listed building consent for any significant works whether internal or external. Generally you do not need to apply for planning permission for repairs, maintenance or minor improvements

BUILDING CONTROL AND PARTY WALL

Not all internal alternations need Building Regulations approval. However if you wish to build a new internal wall, remove an internal wall, or form an opening in an internal wall, building regulations will normally apply.

PERMITTED DEVELOPMENT (PD)

An extension or addition to your house is considered to be permitted development, not requiring an application for planning permission, subject to set limits and conditions. Bear in mind that the PD rights which apply to many common projects for houses do not apply to flats, maisonettes or other buildings. In some areas of the country, PD rights are more restricted, e.g. conservation areas.

The Planning Portal's general advice is that you should contact your local planning authority and discuss your proposal before any work begins. If you want to be certain that the existing use of a building is lawful for planning purposes or that your proposal does not require planning permission, you can apply for a 'Lawful Development Certificate'. It is not compulsory to have an LDC but there may be times when you need one to confirm that the use/operation/activity named in it is lawful for planning control purposes.

BUILDING CONTROL AND PARTY WALL CONTINUED

If your property is a semi-detached or terraced house, you will need to advise adjoining neighbours of your plans under the Party Wall Act 1996. The Party Wall Act is separate from obtaining planning permission or building regulations approval.

PLANNING CONSENT

The Householder Application for Works or Extension to a Dwelling form should be used for proposals to alter or enlarge a single house, including works within the curtilage of a house. If you have established that you need planning permission you should use the Householder Application form for projects such as; extensions, conservatories, loft conversions, dormer windows and alterations. The Planning Department should determine your application within eight weeks.

You should use the application form for Full Planning Permission if your application relates to any of the works relating to a flat.



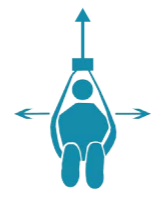
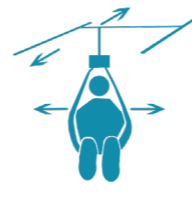




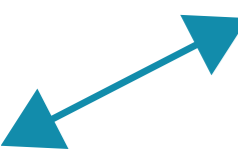
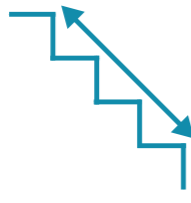
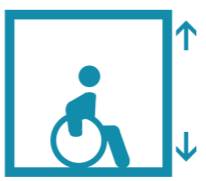



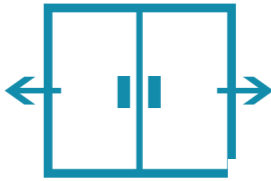
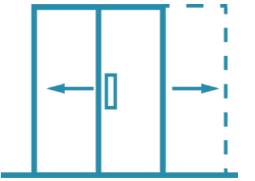
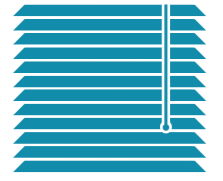


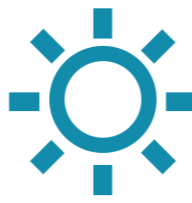

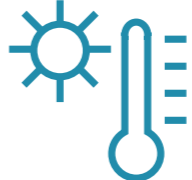


If you are not clear whether you need to apply for planning permission or which application form you should use, please contact your local authority. Conservation areas and listed buildings have separate forms.

Types of Interventions

Projects funded by the DFG grant funding are part of wider spectrum of domestic adaptations with more informal approaches and self-financing. Older people and their families have expressed that as well as a lack of information on what is available many do not want to adapt because of the stigma in the types of products available as well as put off by the unfavourable borrowing terms and conditions. This leads to adaptations happening in times of crisis or as a last resort, when they are most useful as a preventative measure.

An emerging trend towards co-production in health and social care and from tackling 'health risks' to improving well-being suggests that an approach to home adaptations that reflects early intervention and prevention could be helpful.

Below is list of types of interventions that can be utilised in a home adaptation.

							
WET ROOMS	ASSISTED BATHROOM	ONE DIRECTION HOIST	X-Y HOIST	ANTI SLIP FLOORING	RAMPS	DOOR WIDENING	ACCESSIBILITY
							
LEVEL THRESHOLDS	STAIR LIFTS	ENCLOSED LIFTS	PLATFORM LIFTS	NATURAL LIGHT	TECHNOLOGY	AUTOMATIC DOORS	SLIDING PARTITIONS
							
LIGHT CONTROL	ACOUSTICS	CONTRASTING COLOURS	ACCESS OUTSIDE	NATURAL VENTILATION	INSULATION	SECURITY	BOILER

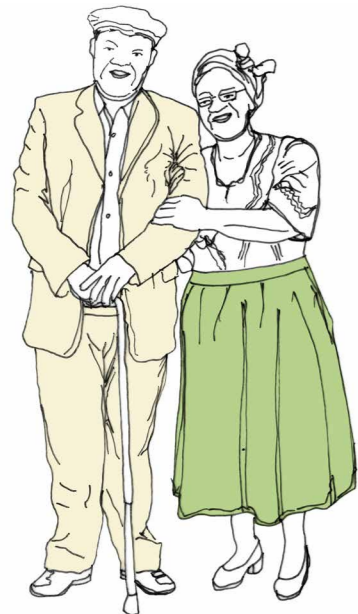
A Collaborative Approach

Many architecture projects require high levels of collaboration. This is especially true in adapting homes for health and/or disability reasons and involves a multidisciplinary team that work together closely with the family and the client throughout the process, often project managed by a local Home Improvement Agency, Staying Put or Care and Repair Agency.

The Centre for Ageing Better's more recent research has highlighted that greatest outcomes are achieved

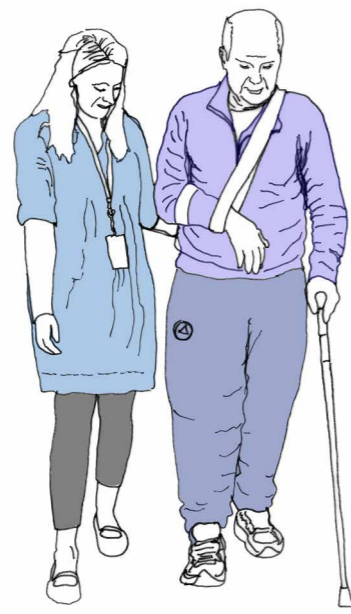
when there is close involvement of families and carers in decision making process.

The diagram on this page represents the different stakeholders in a typical home adaptation project funded through a DFG grant. In smaller adaptations all these stakeholders may not be involved.



CLIENT

The client can be an individual or family member looking to improve their home for an elderly or disabled person.



OCCUPATIONAL THERAPIST

Their role is to review the clients situation and make recommendations how to improve environments to meet their needs. They write the initial brief which informs the project.



HIA CASE WORKER

The Council review applications and try to fund improvements to help the client live safely and comfortably in their home.



ARCHITECT

The architect looks at the Occupational Therapist's (OT) evaluation and combines these recommendations into a proposal. They create a design brief from the recommendations of the OT.



CONTRACTOR

After the planning is granted or the design is complete a contractor will estimate a price and will work along side the council and architect to create the proposal.



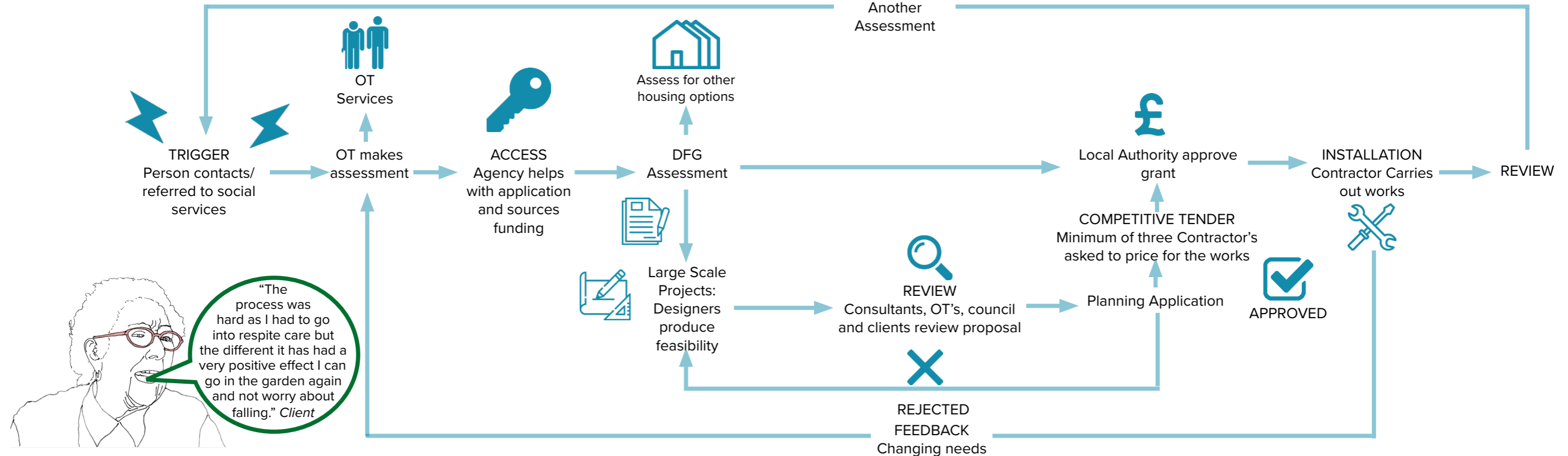
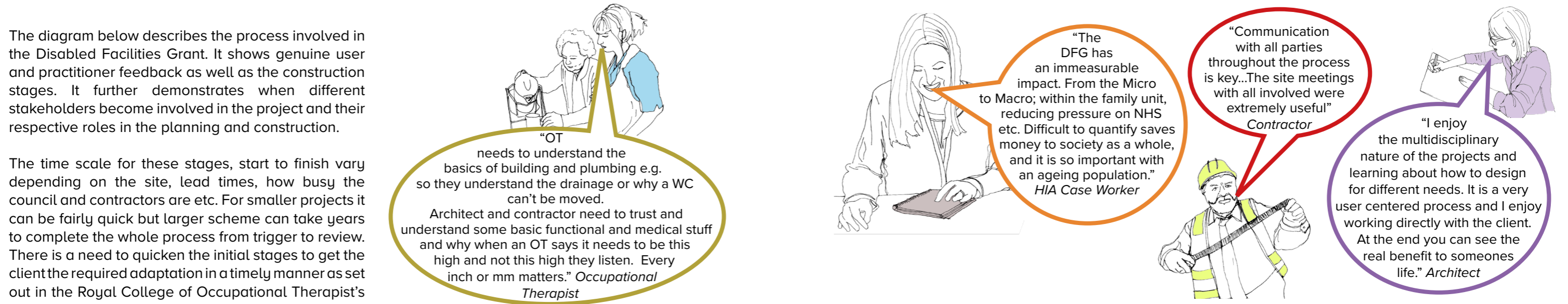
FAMILY/CARER'S

Many people share the environment which is being adapted and have a say within the process. The adaptations are often work environments for carers, social workers, and home environments for other family members.

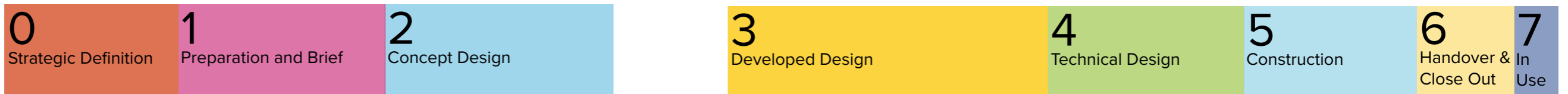
Understanding the Process

The diagram below describes the process involved in the Disabled Facilities Grant. It shows genuine user and practitioner feedback as well as the construction stages. It further demonstrates when different stakeholders become involved in the project and their respective roles in the planning and construction.

The time scale for these stages, start to finish vary depending on the site, lead times, how busy the council and contractors are etc. For smaller projects it can be fairly quick but larger scheme can take years to complete the whole process from trigger to review. There is a need to quicken the initial stages to get the client the required adaptation in a timely manner as set out in the Royal College of Occupational Therapist's guide, Housing Adaptations without Delay.



RIBA STAGES

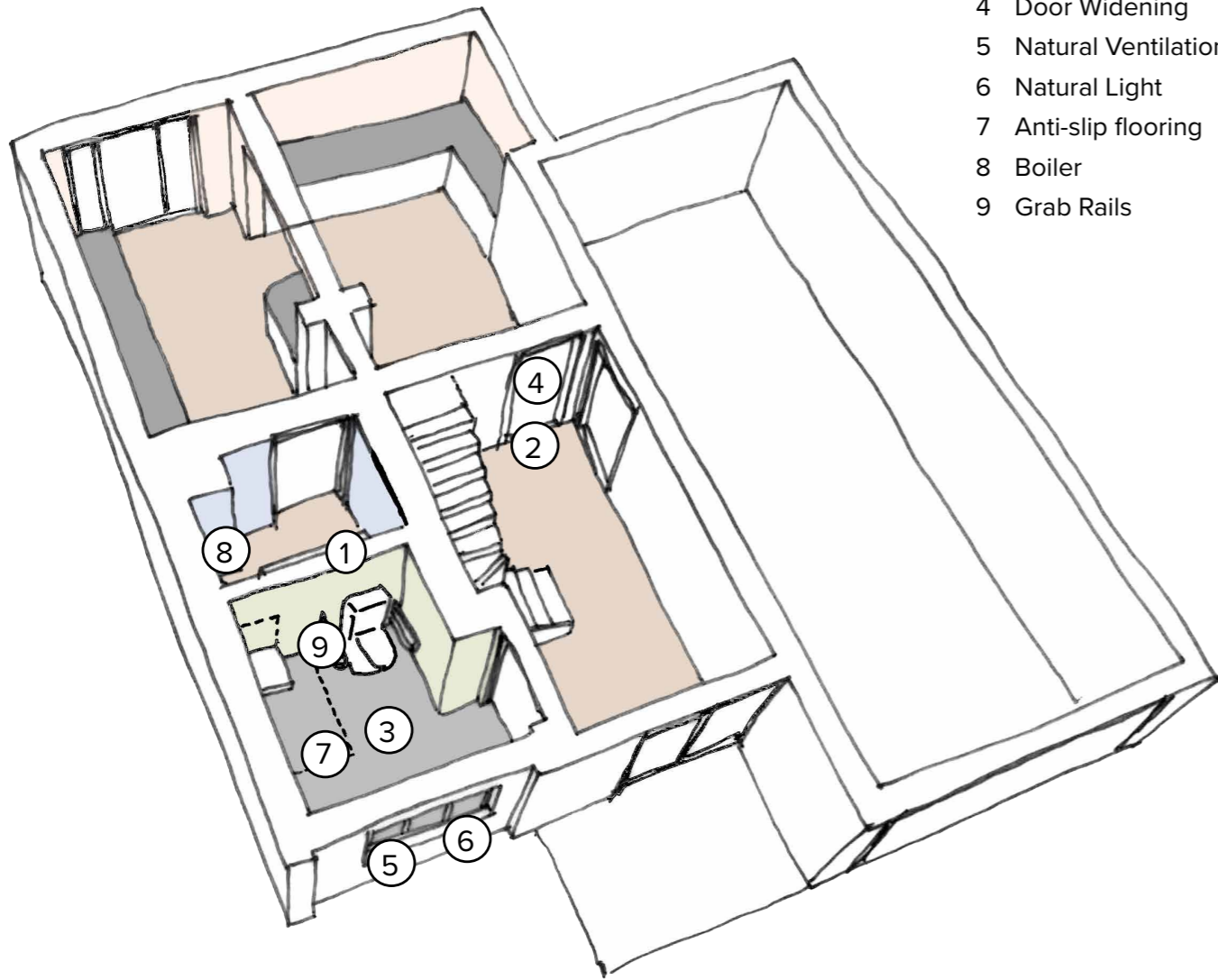


“The RIBA Plan of Work organises the process of briefing, designing, constructing and operating building projects into eight stages and details the tasks and outputs required at each stage.”

Case Study 01



- 1 Internal Extension
- 2 Level Threshold
- 3 Wet Room
- 4 Door Widening
- 5 Natural Ventilation
- 6 Natural Light
- 7 Anti-slip flooring
- 8 Boiler
- 9 Grab Rails



GROUND FLOOR PLAN

CLIENT: Elderly Person
 STATUS: Complete
 LOCATION: New Malden
 PROJECT TYPE: Internal Remodelling
 GRANT: Basic grant with discretionary top up

PROPOSAL

The project brief was to convert the existing garage into an accessible ground floor wet room with remaining space being used for a utility room for the family to be accessed from the kitchen. The client was an older man who was finding it difficult to access the bathroom on the first floor because of a long-term complex condition, this was affecting his well-being and impacted his family who cared for him. Works also included widening of doors to allow better access into the kitchen and making the ground floor level throughout.

OPPORTUNITIES

- By developing the existing garage into a wet room and utility room many of the brief objectives could be met. Furthermore, by adapting the kitchen the client could live more independently.
- Future proofing was important, although the client was walking with a frame at the time of the project ensuring wheelchair turning circles and wider doors was important.

KEY ISSUES

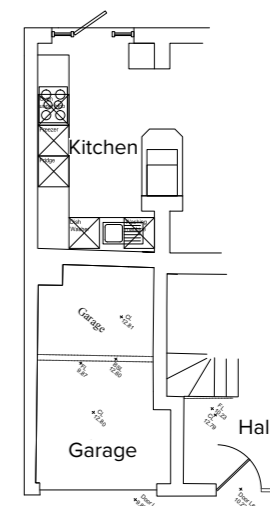
- The rear of the property had already been extended. This may mean that planning would have been required for extra extension if footprint had exceeded Permitted Development Rights.
- Further work to the rear of the property would require survey and removal of the asbestos in the store cupboard at the rear of the property.



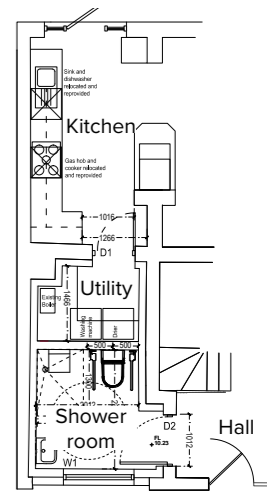
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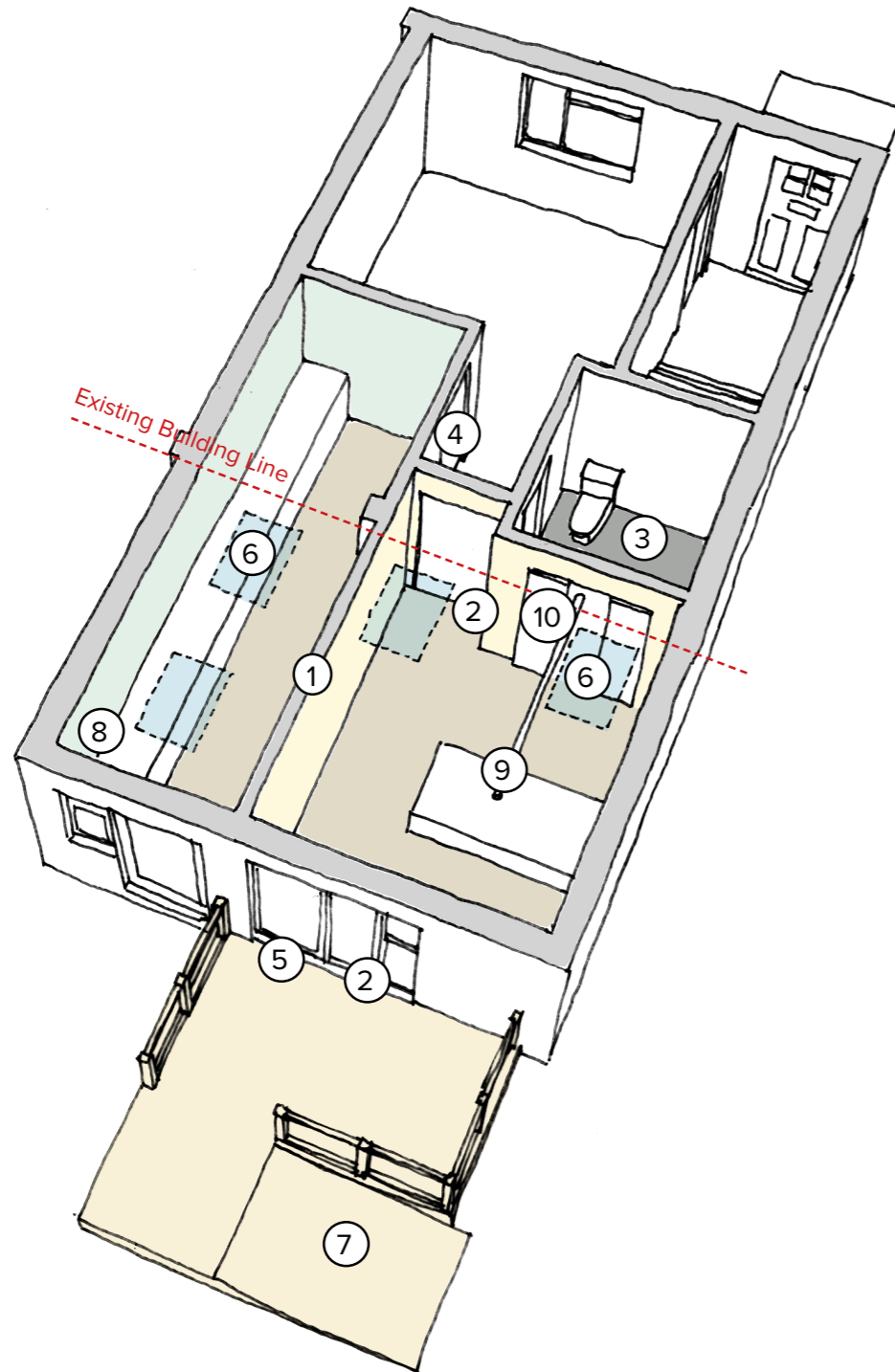


AFTER PLAN

Case Study 02



- 1 Rear Extension
- 2 Level Threshold
- 3 Shower Room
- 4 Door Widening
- 5 Access Outside
- 6 Natural Light
- 7 Ramps
- 8 Boiler
- 9 Hoist
- 10 Sliding Doors



GROUND FLOOR PLAN

CLIENT: Elderly Person
 STATUS: In Progress
 LOCATION: New Malden
 PROJECT TYPE: Extension
 GRANT: Basic grant with discretionary top up

PROPOSAL

The client was bed ridden due to chronic arthritis and acute cerebral ataxia. The broken stair lift left the client stranded in the house. The family were unable to get the client out of bed and needed hoist provision and a wet room to help with bathing and hygiene. A fully accessible single story extension to provide a new bedroom space with wet-room. Ground floor widening of doors for better access to kitchen as well as providing a light open space with access outside.

OPPORTUNITIES

- Using Permitted Developments rights reduced the initial time to create the drawings required, though a lawful development certificate was .
- Working in collaboration with other service providers allowed the brief to evolve to meet the deteriorating needs of the client. Collaboration between the Occupational Therapist, Architect, Councils case officer and Contractor was essential.
- This proposal also helped with general family life, the other occupant of the house was also older and frail and facilities would be of benefit to him as well.

KEY ISSUES

- Access to the property was limited which increased the complexity for the contractor.
- There were several different family members with contrary opinions about finishes and requirements. It highlighted the importance of getting a consensus from all stakeholders.



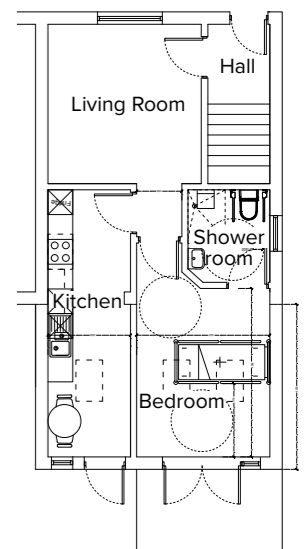
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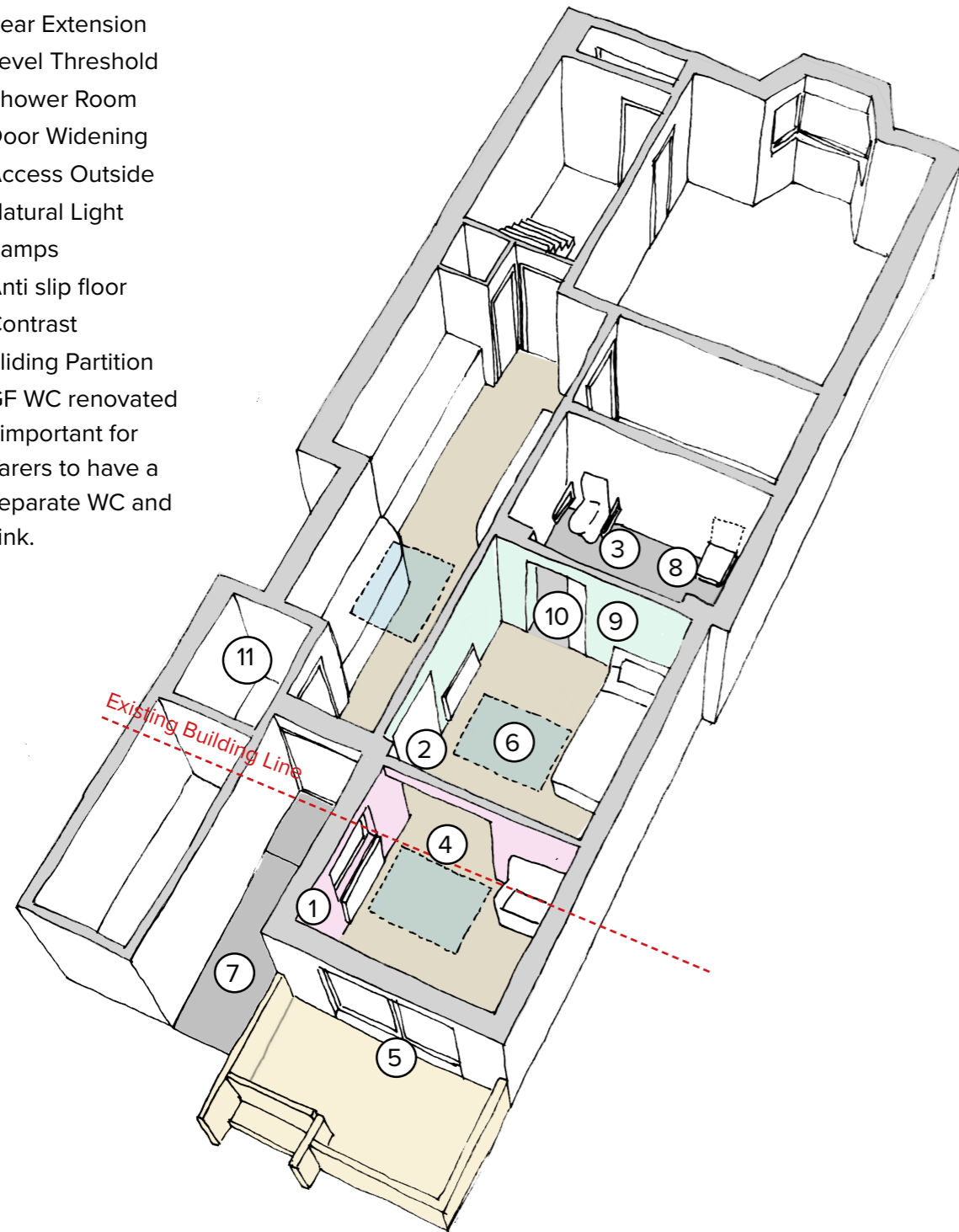


AFTER PLAN

Case Study 03



- 1 Rear Extension
- 2 Level Threshold
- 3 Shower Room
- 4 Door Widening
- 5 Access Outside
- 6 Natural Light
- 7 Ramps
- 8 Anti slip floor
- 9 Contrast
- 10 Sliding Partition
- 11 GF WC renovated
- important for carers to have a separate WC and sink.



GROUND FLOOR PLAN

CLIENT: Elderly Person
 STATUS: Complete
 LOCATION: Chessington
 PROJECT TYPE: Extension
 GRANT: Basic grant with discretionary top up

PROPOSAL

Client suffers from mobility issues and is prone to infection, needs provision of wet room as currently cannot access the shower upstairs as well as removal of trip hazards and steps on ground floor. The brief was to provide a fully accessible single story extension to with a new self contained bedroom space and shared kitchen. This was proposed to be built in footprint of existing building. Works also included widening of doors to allow better access into the kitchen and making the Ground Floor level throughout.

OPPORTUNITIES

- The architect, councils case officer and family worked closely to incorporate lots of personal elements which improved the clients well-being dramatically.
- Working with a sensitive contractor allowed easy communication and reduced the stress on site.
- There was a strong vision for the project from the outset which has been developed collaboratively between the stakeholders.

KEY ISSUES

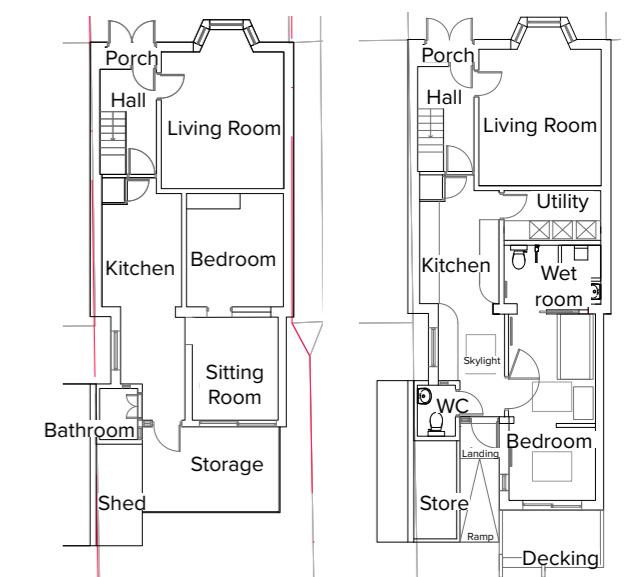
- The scale of the project meant that a prior approval was required from the council which cannot be fast tracked.
- Working with existing buildings is complicated, on this project the building fabric was poor. Asbestos removal and disposal increased the cost and slowed progression.
- During the project the client had to go into respite, this was for longer than expected which was disruptive, increased stress and reduced the effectiveness of communication between the stakeholders.



BEFORE PHOTOGRAPH



AFTER PHOTOGRAPH



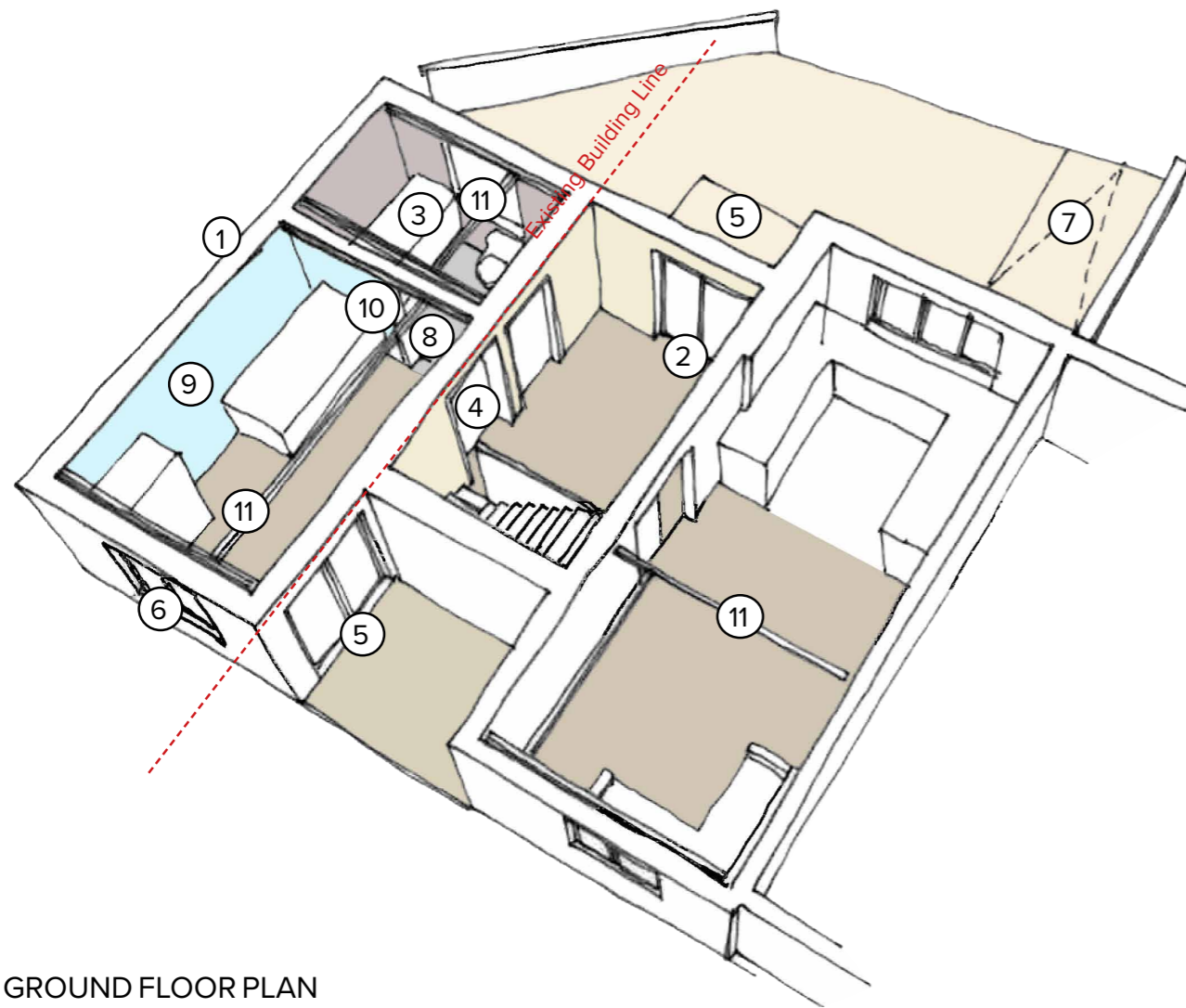
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Case Study 04



- | | |
|--------------------------|----------------------|
| 1 Side Extension | 7 Ramps |
| 2 Level Threshold | 8 Anti slip floor |
| 3 Height Adjustable Bath | 9 Contrast |
| 4 Door Widening | 10 Sliding Partition |
| 5 Access Outside | 11 Hoist |
| 6 Natural Light | 12 Acoustics |



GROUND FLOOR PLAN

CLIENT: Child
 STATUS: Complete
 LOCATION: Surbiton
 PROJECT TYPE: Extension
 GRANT: Basic grant with discretionary top up

PROPOSAL

The project was for a disabled child to provide a fully accessible ground floor extension with a bedroom and wet room for the client. The scheme involved widening doors, non slip flooring, increasing natural light as well as making ground floor level throughout.

OPPORTUNITIES

- The house had a large plot allowing extension to the side and maintaining a good sized garden.
- Working collaboratively with all stakeholders allowed easy communication and reduced the stress on site.

KEY ISSUES

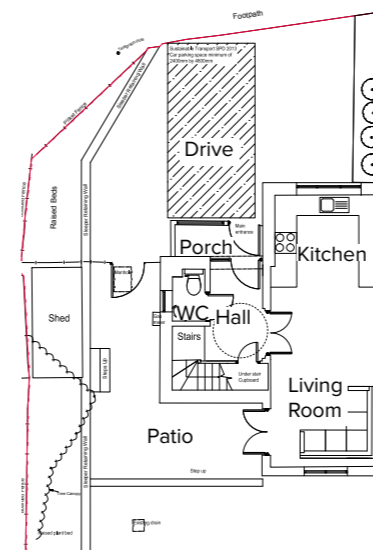
- The first design proposal was rejected at planning due to certain planning constraints. This lengthened the design process and cost.
- The family remained in the house throughout construction which required careful planning of certain construction elements to align with children's holidays and school timings.



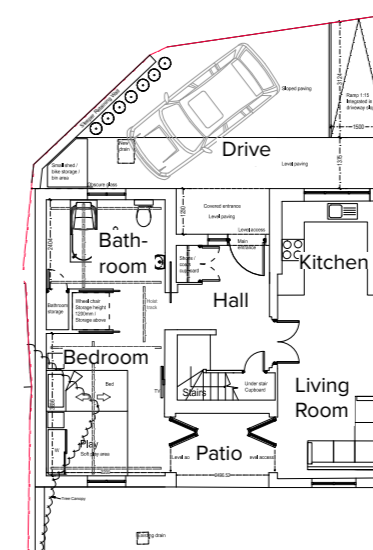
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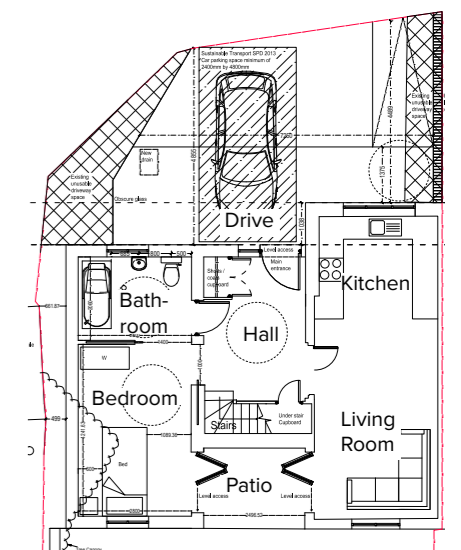
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EXISTING PLAN



PROPOSAL 1 PLAN - REFUSED PLANNING



PROPOSAL 2 PLAN - GRANTED PLANNING

Feedback - Key Findings



A feedback questionnaire was developed using key themes to understand the process as well as the final output.

BRIEF AND DESIGN

The process to create the brief should allow time to explore and negotiate different options. It is common for the aspirations of the client and family to differ from the Home Improvement Agency or the Occupational Therapist, working towards a consensus between stakeholders is key.

Building regulations and other guidance do not cover all disabilities and requirements. There is a need for more legislation that recognises different conditions that are caused by ageing. This should focus on adaptation of existing dwellings as well as new build.

The design must consider the changing needs of the client. Developing a brief that future proofs the home will keep people in place for longer and save money in the future.

A multidisciplinary team including health, design and housing specialists is key to producing the right brief and also mitigating risks throughout the project.

SOCIAL IMPACT

Home adaptations have a wide social impact. Initially improving the client’s living conditions and well-being, but also the benefit to the wider family and community.

There is also evidence of cost saving benefits to the NHS keeping older people at home reduces hospital admissions and readmissions, and costs for residential care. Much of this research focuses on minor adaptations, there is a need for more to be done in major adaptations.

There needs to be better indicators to measure the social impact of these projects looking closely at the holistic effect on the client and wider family.

Early referrals could increase the social impact of the DFG process to also be more preventative. Planning for the future and making sure that instead of having

to do multiple adaptations that one larger one could encompass the progression of the disability.

COLLABORATION AND COMMUNICATION

The construction process can be very confusing and stressful for vulnerable older people. It is essential the team builds trust with the client and listens to them to avoid conflict and confusion.

Different visual methods to communicate the design may need to be employed depending on the situation. Plan drawings and visuals can sometimes be difficult to read, marking things out at 1:1 to understand the size has been particularly useful.

Recognising the knowledge and value that each ‘actor’ brings to the process will foster a collaborative approach.

SPECIALIST KNOWLEDGE

Specialist knowledge is key for the team in this process. More training is required for designers in how equipment actually works, many rely on Part M guidance for access and mobility which is limited.

There is a need for more holistic design guidance that considers the principles of dementia-friendly design and the users lived experience.

The team should learn from each other and share knowledge. In many cases the architect learns detailed design specifications from the Occupational Therapist and they in turn can learn about basic plumbing for bathrooms.

Keeping up to date with the latest design and product innovations is important as the sector is changing. The role of the designer is to integrate features that support people but do not have the clinical appearance of a disabled adaptation.

Assistive technology could be better utilised in the DFG process, this would require more training for the team and family to understand how to apply this.

This report aimed to capture the process and final outcomes of several major home adaptations undertaken by Archadia using a well-being approach. This research has been a way to critically reflect on the successes and areas which need improvement within the process and procedures.

The document highlights the decidedly collaborative nature of the DFG and how meaningful engagement with the end user, families and care givers will not only result in a better designed solution but also mean that the overall experience is a positive one. Working closely with occupational therapists becomes essential to understand the client's needs, also working closely with local authority to understand what is feasible under the grant and not raise expectations if additional money cannot be found is also important.

In our experience we have found that people in need of adaptations find it hard to know where to look for information and how the planning system works daunting. This document clarifies the connection between the construction, design process and the regulatory processes by showing how adaptations fit into the overall planning system and connecting the DFG process to the design/construction process.

We have found the most successful projects consider the potential progression of the illness/disability. Understanding the home experience through a well-being lens which incorporates environmental aspects as well as accessibility help to future proof the design and increase sustainability. When a client needs several alterations over a long period this requires several grants to be create which adds to the time and expensive of a project. By doing all the work in one go you reduce start-up costs and the administration required.

The main detracting element we have found is the length of process. There are several factors which can cause delays, this could be at the application stage, planning stages or even the lead in time for specialist equipment which causes clients some grievance. At Archadia we are focusing on stream lining the initial brief and consultation for the projects. We are using a proforma which quickly ascertains appropriate design

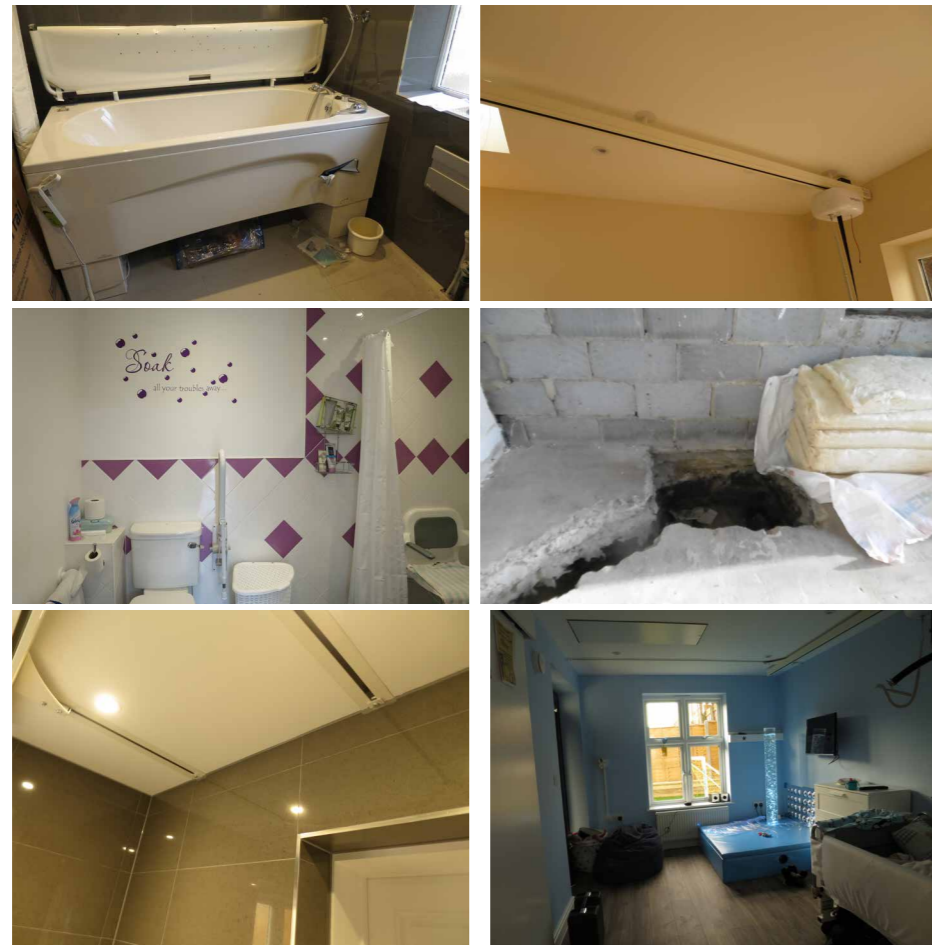
solutions based on the existing housing elements. Furthermore, we are using early cost estimates to help the council determine the scale and viability of a grant more easily. We need more joined up thinking between all the stakeholders and agencies involved. It is important to remember everyone is working towards the same goal.

From the local authority level there is a need to rethink processes to reduce the amount of time taken to get relevant approvals.

The process to create a DFG is highly reliant on the local authority, from the funding, planning application to building control. It is highly important to keep good communication throughout at all stages with all the different departments.

Moving forward Archadia are looking in the coming months to produce another piece of research focusing on adaptable interventions which can be re-used. With the majority of existing housing stock unsuitable for people as they age or those with disabilities. We want to look at reducing start-up costs and how innovative sustainable pre-fabricated structures could be used to speed up the DFG process. Our focus is trying to find a solution which can be quickly installed to reduce overall costs and time scales.

As well as this Archadia have been exploring the potential of developing a tool kit which looks at a user centred approach to home adaptation with universities, local authority partners and charitable organisations.



Archadia have worked on numerous major adaptations with London Borough HIAs at different job stages. Meaningful engagement with the end user, families and care givers will not only result in a better designed solution but also mean that the overall experience is a positive one.

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Tel: 0208 941 5161
Website: www.archadia.co.uk
Email: archadia@archadia.co.uk
Twitter: @ArchadiaArch

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