



TOXTETH FOOD CENTRAL DESIGN & ACCESS STATEMENT

FOR SQUASH NUTRITION

FEBRUARY 2015



This report has been produced by URBED for Squash Nutrition.
For further information, please contact Marianne at URBED

Marianne Heaslip
marianne@urbed.coop
0161 200 5500

Documents forming this Planning Application

Document	Title	Author
Planning Forms		URBED
Design and Access Statement	Toxteth Food Central: Design and Access Statement	URBED
Drawings	PL01 Location Plan	URBED
	PL02 Existing Site Plan	URBED
	PL03 Proposed Site Plan	URBED
	PL04 Proposed Ground Floor	URBED
	PL05 Proposed Mezz Level	URBED
	PL06 Proposed Roof Plan	URBED
	PL07 Proposed Elevations - 1	URBED
	PL08 Proposed Elevations - 2	URBED
	PL09 Proposed Sections	URBED
	PL10 Site Section and Elevation	URBED
	926 Photo Sheet	URBED

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1. INTRODUCTION

This Design and Access Statement accompanies the full detailed planning application for Toxteth Food Central - a new community food hub to be developed on Windsor Street in Toxteth, Liverpool.

This document explains the evolution of the designs for the scheme which have been influenced by engagement with future users of the facility, the character of the local area and the vision and brief developed by Squash Nutrition.

Squash Nutrition

Squash Nutrition are a Toxteth-based social enterprise, working within communities to share skills and promote food health and well-being.

As part of their work in Toxteth, Squash Nutrition have already developed three new community growing spaces and facilities along Windsor Street including:

- A seed library and seed saving facility at Toxteth Library;
- A garden for food growing and Solar Dome run by the Grapes Group; and
- A demonstration garden and rooftop beehive facility at John Archer Hall

The Vision for Toxteth Food Central

Squash Nutrition aim to create a vibrant community-led food hub in Toxteth that will support and enhance their existing services in the area, in developing community-led solutions to problems of food access and food poverty in this ethnically diverse area of the city.

The new food hub would be used to deliver the following services:

- Community and professional training services including creative nutrition, urban agriculture and bee-keeping;
- A community shop selling sustainable, affordable produce;
- A community-run cafe producing seasonal, multicultural food;
- A community-use kitchen including a 'food lab' for local food business start-ups;
- Advice on community use of land for food growing.

Community Engagement

The foundation of Squash Nutrition's work is based on an ethos of community engagement and cohesion. This will be reflected in both the physical built assets resulting from the project, and the process used to achieve them.

This ethos has greatly directed the development of the proposals which form this planning application, by engaging the future users in the design process from the beginning of the project.

This engagement will also continue onto the construction phase, with users helping to build and maintain the buildings.

Both Squash Nutrition and URBED believe that engaging with building and services users in the design process will produce a better outcome.

The Brief

In developing the buildings and site to support these services, there are a number of criteria that need to be taken into consideration. These criteria have been developed through hands on community design sessions:

- The building should be open, accessible and welcoming to all - an inclusive design approach will be taken.
- There should be a close relationship between 'inside' and 'outside' spaces, maximising the opportunities for growing and for building users to engage with growing activities and outdoor activities.
- All spaces to be used to the full and multi-use where possible. The roof will not just keep off the rain, but may also be a site for bee-keeping, energy collection (from solar panels) and rainwater collection.
- Construction materials should be environmentally sound. Robust, long-life, low maintenance, re-used and recycled materials will be preferred.
- Buildings will be designed to be low energy use - both to reduce carbon emissions and environmental impact, and to reduce running costs, making the project more financially sustainable.
- The potential for renewable energy to be integrated into the buildings and across the site will be a key consideration. In particular solar photo-voltaic and solar thermal collectors to provide electricity and hot water respectively.
- The site and buildings will be designed to use water responsibly, with efficient use of mains water, and re-use and collection of rainwater for growing activities. Again, this is both so that the project is both environmentally and financially sustainable.
- All of these features will be expressed in the designs, to provide visual interest and to act as a learning aid for building users.

2. SITE CONTEXT

Location

The site is located on the corner of Windsor Street and Upper Warwick Street in Toxteth, Central Liverpool.

It is approximately 1 mile from Liverpool City Centre - a 15 minute walk. Windsor Street connects to Liverpool Cathedral and St James' Gardens to the North and onto Admiral Street and Princes Park to the South.

Transport Network

Windsor Street and Upper Warwick Street B5177 are both well connected to the surrounding road network and subsequently connect directly with the A562 Upper Parliament Street and A561 Park Place.

Walking: The site lies in the heart of Toxteth and it is intended that the majority of its users will walk from the surrounding residential areas.

Cycling: The site lies along one of the main cycle routes from the city centre to the residential areas to the south of the city, which also forms part of the National Cycle Network (Route 56).

Public Transport: There are a number of bus stops within a 5 minute walk of the site with services into the city centre and out towards South Liverpool, as well as circular routes around the city. (Routes 26, 27, 202, 204, 600, 612, 681, 682, C4). Central Station and Lime Street Station are a 10 minute cycle ride away or a 25 minute walk.



View of the site from Windsor Street, looking southwards



3. THE SITE

Location

The site is located in a predominantly built up urban area. A number of residential streets surround the site and there are a number of local services located within close proximity to the site and along Windsor Street, including:

- Two primary schools;
- Fire-Fit Hub - A facility for young people offering sports, music, culture based activities also including the local fire station;
- Toxteth Library;
- Heal 8;
- Toxteth TV;
- Existing Squash Nutrition facilities;

This means it is in a good location and close to existing services that draw people in from the local area.

Previous Use

The site was formerly the location of domestic garages, which have since been demolished. However the slabs and foundations of these remain.

Character of the Site

At present the site is derelict and shabby in appearance, detracting from the quality of the public realm. The site is bounded by a green wire fence onto Windsor Street. The remainder of the site is bounded by 2m high brick walls to the residential properties and to the derelict public house site on the corner of Upper Warwick Street. Shrubs and grasses have grown through the concrete slabs and there is rubbish scattered around.



Fire-Fit Hub



Toxteth Library

Views into the site



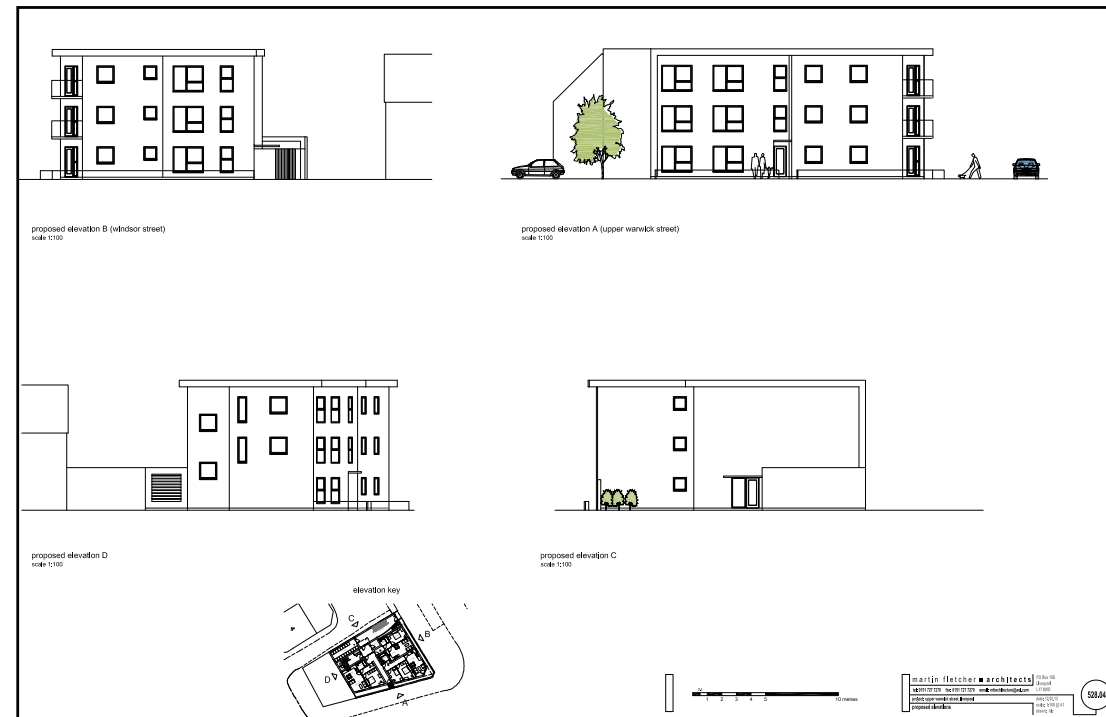
View into the site from footpath between Windsor Street and Luke Street showing 'Fire Fit' to the left, the derelict pub on the corner of Windsor Street and Upper Warwick Street in the background, and the houses on Luke Street on the right.

Adjacent Sites

A derelict pub building lies on the corner of Windsor Street and Upper Warwick Street which lies adjacent to the site.

A planning application was approved in October 2013 for a three storey block of 8 apartments.

The drawings to the right show the layout of the new block. The siting and massing of this will be taken into account when designing the scheme.



Site proposals, Source: Liverpool City Council, Planning Explorer, Application 13F/1356, 20-08-2013. Author: Bankhouse Management and Development Limited, plans by Martin Fletcher Architects

Green Infrastructure

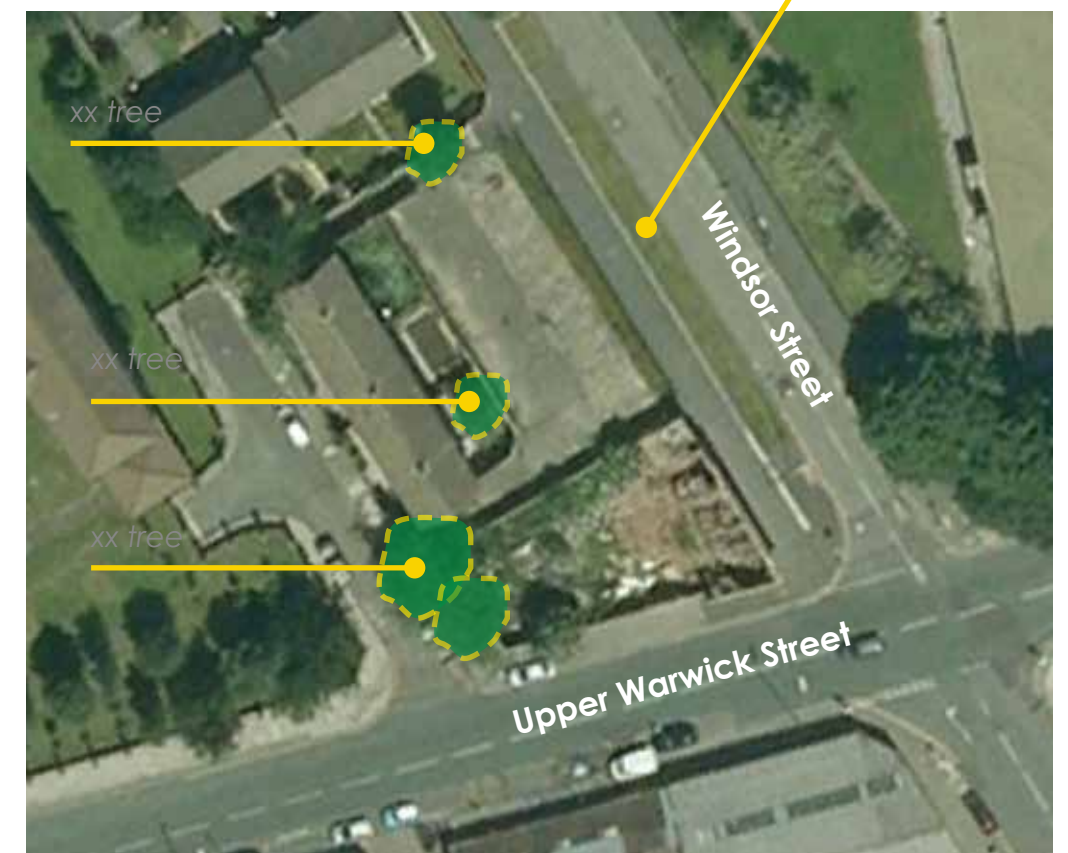
There are several trees within close proximity to the site (highlighted in green):

It is intended that all trees around the site will be retained and it is expected that the extent of tree roots are unlikely to affect the design of the building.

The nature of the proposed use as a community garden is likely to increase the biodiversity of the site, by offering a wider variety of plant species, and the housing of bees on the site will in turn increase pollination of plant species in the local area.

It is likely that this will enhance the green nature of the site within its urban setting.

Strip of grass along pavement on Windsor Street



Google earth Image © 2015 Getmapping plc

4. SITE ANALYSIS



Opportunities

Street Frontage: The site has a long street-frontage onto Windsor Street, just down the road from Squash Nutrition's existing offices. This has the advantage of having the potential to provide a high degree of visibility to the activities that take place there. Being located on a cross-roads, and just over the road from the 'Fire Fit' centre, it provides opportunities for 'passing trade'.

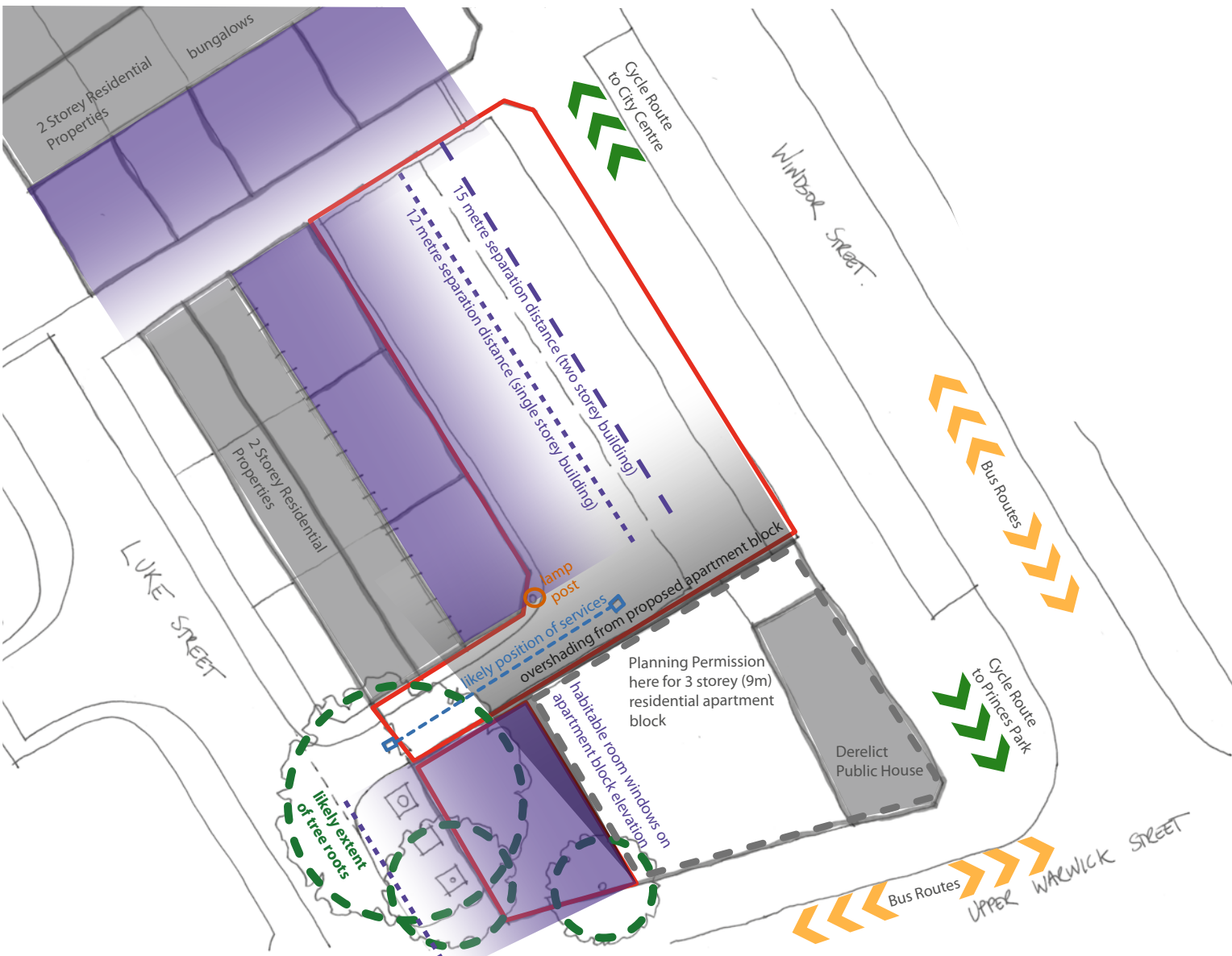
Accessibility: The site is well located in the centre of Toxteth, close to local services and accessible from Windsor Street and Luke Street. There is also a footpath running alongside the north west side of the site, further increasing access into the site. The site is relatively level - allowing level access to the building and site.

Public Realm: Developing the site will provide interest and activity to the street scheme and enhance the look of the site, which is derelict at present.

Constraints

Concrete slabs remain on the site from the previous use as garages. This will be mitigated by leaving the slabs in place in the garden area, making good where necessary, and creating new structures and raised beds on top of them as needed. This is the most cost effective and sustainable approach - which means that none of the existing site materials need to be removed to landfill. A similar approach will be taken where possible to the construction of building foundations.

Separation distances: The main constraint on the site is the presence of residential properties to the back of the site on Luke Street. Any new building will have to ensure that these are not unduly over-looked, so that their privacy is



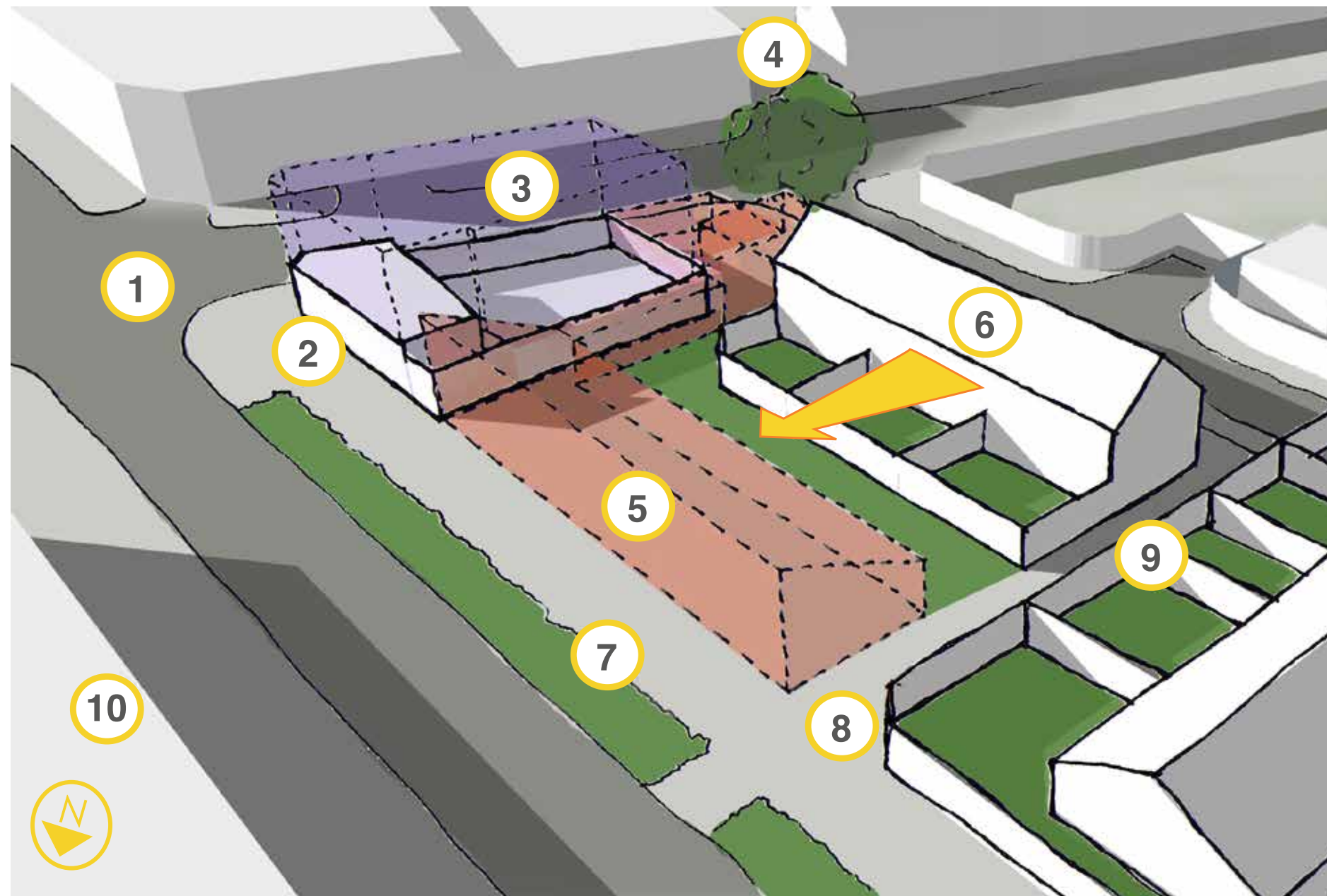
maintained, and their access to natural light is unobstructed.

The diagram above identifies certain aspects of the site including 12 and 15 metre separation distances from surrounding residential blocks and the extent of the block of flats to be built on the adjacent site, and where its shadow will fall.

3D View

The diagram on the right analyses the constraints and opportunities of the site:

1. Junction of Windsor Street and Upper Warwick Street - A relatively busy road and main bus route, providing easy access to the site.
2. Derelict Public House on Corner of Windsor Street - This property has been derelict for a number of years, with only a shell remaining.
3. Outline of proposed new apartment building - this is a 3 storey, 9 apartment block proposed for the corner site. It contains first floor windows from habitable rooms facing Luke Street, neutralising this area of the site for development. There are no habitable rooms on the elevation facing the main part of the site - with bin stores and a bike store bordering the Squash Nutrition site at this point.
4. Existing trees to be retained - there are no trees on any areas of the site where building is proposed. Existing trees on the southern edge of the site will be protected during building work.
5. Approximate 'buildable' volume for Toxteth Food Central - taking into account need for reinforcement of street line, whilst reducing impact of any new building on neighbouring residential properties.
6. Houses on Luke Street showing required distance to maintain privacy and



prevent over-shadowing.

7. Existing grass verge - opportunities for planting and landscaping in future, in collaboration with Liverpool City Council (not part of this application).
8. Pedestrian access from Windsor Street to Luke Street in poor state of repair - another opportunity for future environmental improvements.

9. Bungalows and adjacent 2 storey houses, with rear access onto public footpath.

10. Toxteth 'Fire Fit Hub', Fire Station and sports centre - The new development will need to avoid blocking access for Fire Engines. However, may also provide a useful new facility for visitors and staff at Fire Fit.

5. PLANNING POLICY

At present the site is vacant land, previously used for domestic garages, which fall under the Use Class - Sui Generis (SG): Garages.

The planning application will seek to apply for a change of use to the following uses:

- Community Garden (SG)
- Cafe and ktichen (Use Class A3)
- Community Shop (Use Class A1)
- Training room (Use Class D1)

Using the site in this way will provide a number of benefits to the local and wider area:

- Opportunity for community food growing
- Opportunity for education in horticulture and nutrition
- Brings a new service to the area - community run shop and cafe
- Revive a derelict site
- Provide new green habitat which can increase biodiversity
- Enhance the street scene
- Provides the opportunity to grow food locally and reduce food miles
- Provides employment and training opportunities for local residents.

Relevant planning policies which relate to and support the proposals for the site have been identified in the adjacent table:

Policy Document	Policy	Wording	Comments
Liverpool Core Strategy 2008, Submission Document	Strategic Policy 26 Protecting and Enhancing green Infrastructure Page 93	3. Green infrastructure will be managed and enhanced to support the regeneration of the City, strengthen its distinctive sense of place and provide a multi-functional resource capable of delivering a wide range of environmental, economic and other quality of life benefits for local communities within the City by: c. Supporting innovative small-scale green infrastructure projects which meet identified needs of that area. This could include food growing, small community gardens or public art projects.	This policy supports our proposals for creating a community garden.
Supplementary Planning Guidance Note 10: New Residential Development	Separation Distances Page 3	16. Window to Window Separation Distances: <ul style="list-style-type: none">• front elevations of habitable rooms facing each other in two-storey houses, should be a minimum of 21.5m apart;• rear elevations of two-storey houses should normally be a minimum of 23m from other habitable room windowed elevations;• rear elevations of single storey houses should normally be a minimum of 20m from other habitable room windowed elevations, and; 17. Window to Wall Separation Distances: <ul style="list-style-type: none">• habitable room windowed elevations facing single and two-storey flanked walls should be a minimum distance of 15m apart, and a further 1m for each additional 1m change in level between affected walls will be required;• non-habitable room windows facing a two storey gable end should be a minimum distance of 7m apart• in the case of bungalow (single storey) development, the separation distances above cane be lowered to 12m and 7m respectively.	This SPG provides guidance on where the buildings can be situated on the site and have been used to direct the designs. On consultation with the planning officer, it was agreed that a 12m distance would be acceptable for window to window separation distances for a new single storey building, given the location of the site in a built up urban area. (Email chain is available on request).
Supplimentary Planning Guidance Note 9: Shop Fronts		This documents provides guidance on the design of shopfronts.	Guidance has been taken into account whilst designing the shop-front.

6. PLANNING HISTORY

The site was previously developed with domestic garages. The buildings have since been demolished, but hard standing still remains on site.

Past planning applications which relate to the site have been included in the table to the right:

Date	Planning Application Number/ Decision	Location	Development Description	Comments
12/11/1985	L266643 Approve without conditions	Vacant site Luke Street / Upper Warwick St	To enclose vacant site by the erection of a 2m high brick wall and to use as a yard in connection with adjacent public house	Relates to small area of site on corner of Luke Street/ Upper Warwick Street.
16/07/1990	90P/1197 Approve with conditions	Sussex Gardens Upper Warwick Street Park Place Luke Street L8	To refurbish the 5 blocks of existing flats and to erect two 3 storey blocks of 18 flats and one 3 storey block of 6 flats and to carry out landscaping works and to provide car parking	Relates to nearby flatblocks.
26/10/2010	10F/0953	Land at Windsor Street/Upper Warwick Street, Liverpool 8 (Pub Site)	res dev:10+ units/ over 0.5ha part 2 part 3 storey block of 11 apartments	Corner site currently derelict public house. Approved subject to legal agreement. Subsequent issues of ownership arose and the scheme was never finalised.
11/10/2013	13F/1356	Land at Windsor Street/ Upper Warwick Street, Liverpool L8 (Pub site)	Construction of 8 apartments within a three storey block, together with bin storage and cycle storage	Application approved in 2013. Siting and massing of buildings will affect layout of site, which has been considered in the site analysis section of this document.

7. ENGAGEMENT

Idea Development

Over the last few years local residents have worked with creative social health organisation Squash Nutrition to grow and cook fresh and healthy food in and around Toxteth. Together we have welcomed hundreds of people to community markets, cooked lots of soup in the dutch pot over the fire and grown 3 food gardens along Windsor Street. This year, we have been running pop-up cafes and food-growing sessions on streets in L8 and have been having lots of conversations about community wellbeing, tight family budgets and how Windsor Street could become a Food Corridor!

In response, the idea of a community food hub has been evolving, and is now really beginning to take shape. Through discussions, sharings and a successful bid to the Social Investment Business, Toxteth Food Central is coming in to being! This significant capital grant will help us to transform the piece of disused land on the corner of Windsor Street and Upper Warwick Street into a thriving community food asset.

About the TFC community design team

Toxteth Food Central Design Team is made up of local residents including growers, artists, cooks, environmentalists, bee-keepers and passionate vegetable fans, alongside arts and health organisation Squash Nutrition and architecture firm URBED. Both Squash Nutrition and URBED believe that engaging with building and service users in the design process will produce a better outcome. The timeline below details the engagement process that has taken place so far. To date there have

been 7 sessions -covering site-visioning, a field trip, hands-on model-making and publicity. The public consultation events held in December 2014 were also planned in collaboration with the community design team.

Inspirations

In the design workshops we looked at existing buildings, to find out what might be possible at Toxteth Food Central. The images below are some of those chosen by the design team:



Precedents

The two precedent studies below demonstrate how similar schemes have been brought forward following engagement with the local community. These were used both to help design the engagement process and inform the proposed designs:

Hulme Community Garden Centre

Hulme, Manchester



URBED have been working with Hulme Community Garden Centre over the years to extend and develop the centre.

The Garden Centre is a community run not-for-profit horticultural project located in South Manchester. The area is similar to Toxteth in terms of its location from the city centre and levels of deprivation.

In 2012, URBED submitted a planning application to expand the existing facilities onto a vacant adjoining car park, to include a new shop and office, growing areas, workshop and meeting room and poly-tunnel.

URBED also aided a group of Sheffield University students to collaborate, design and build an outdoor wooden growing structure:



In 2014, URBED ran a number of workshops with the centres volunteers and local people to develop a new building for the centre - named the Manchester Urban Growing Centre.

Village Greens

Prestwich, Manchester



URBED were commissioned by Village Greens to help develop plans for the fit out of their new co-operative food store in Prestwich.

Village Greens is a food store owned by the community. It provides an ethical alternative shopping experience to supermarkets, a place to buy fresh fruit and vegetables, wholefoods and everyday essentials made from natural ingredients; where people can buy high quality food, with minimal processing, at affordable prices.

The Village Greens store is in the heart of Prestwich, in the Longfield Centre, utilising an existing vacant site and making it easy for everyone to visit and shop in.

Village Greens supports Local in Prestwich, and encourages us all to enjoy the wonderful array of local businesses that Prestwich has to offer.

8. CONSULTATION

Workshop 1

Looking at example buildings and inspiring possibilities for Toxteth Food Central



Ideas/ Outcomes

- The importance of openness and accessibility for all in the building was discussed, as were different styles and types of architecture.
- In a brainstorming exercise on 'people, activities and feelings' we talked about who would use the building, what they would do, and how it should feel. A range of activities were discussed - from growing to cooking and shopping.
- A collaging exercise was carried out, with members of the community design team choosing options from a large range of printed images. This highlighted the importance of greenery, lots of daylight and natural materials for the design team.

Workshop 2

Field Trip to Unicorn and Hulme Community Garden Centre in Manchester



Ideas/ Outcomes

- The visit to Unicorn demonstrated the potential to provide food at affordable rates if the some of the processing and packing is done on site from bulk purchases - highlighting the need for space to do this.
- The visit to Hulme Community Garden Centre inspired many in the team with the potential for using natural materials in an imaginative way for temporary structures and facilities in the garden. It also made the team think about how to make a space that is welcoming whilst also being secure.

Workshop 3

Testing ideas by making models on a plan of the site



Ideas/ Outcomes

- In this session the team started to get to grips with what it might be possible to fit onto the site. We explored the constraints due to the existing buildings around the site, and the proposed apartment block on the corner of Upper Warwick Street.
- We talked about the importance of making the front of the building onto Windsor Street highly visible, giving clues to what happens in the building and the garden space, whilst also making sure the people in the building feel safe and secure. The need for activities to sometimes overlap, but also be clear on separations to ensure some privacy, was discussed.

Workshop 4

Explaining ideas to the whole design team



Ideas/ Outcomes

- Some key design ideas were developed in this session including the suggestion for green roofs and greenery generally to be integrated with the building and the need for views into and through the building - through a form of 'archway' - creating a welcoming aspect and activity onto Windsor Street.
- The arrangement of the different spaces within the building was discussed, with the need for the shop/cafe to be the most visible element of the building, the need for the training space to be visible but afforded more privacy, and the need for the offices to have the highest degree of privacy.

Public Exhibitions

Two exhibitions were held on Tuesday 16th and Friday 19th December at 5-7pm and 9.30 - 11.30am respectively, to showcase the developing proposals to local people and businesses.

Publicity

- Flyers advertising the event were delivered to 1500 local homes, businesses and organisations on 4th and 5th December 2014.
- On 5th Dec 2014 all houses on Luke street and houses opposite on Upper Warwick Street were visited by the Squash Team with personal invites to the consultation sessions and a letter outlining the project.
- All businesses further up on Windsor Street including the cafe, newsagents and mini-mart were visited and invited along.
- Posters were put up in the local area
- Advertised on twitter and Squash Nutrition's facebook page.
- Advertised on 'Project Dirt' - <http://www.projectdirt.com/>

Format

Two A1 boards were displayed at the event and these provided information about Squash Nutrition, the workshop sessions which had taken place, an analysis of the site and details of the project brief.

Members of the Squash Nutrition team: Lisa Agatha, Becky Vipond, Clare Owens, Jackie Swanson, Gemma Jerome, Kate Brennan plus 8 local residents (members of the community design team) and Marianne

Heaslip from URBED and were on hand to take people through the proposals and answer any questions locals might have.

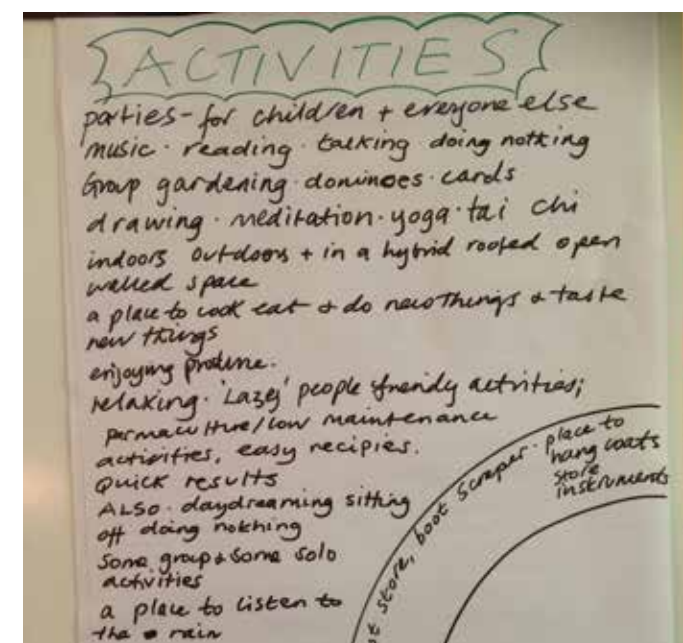
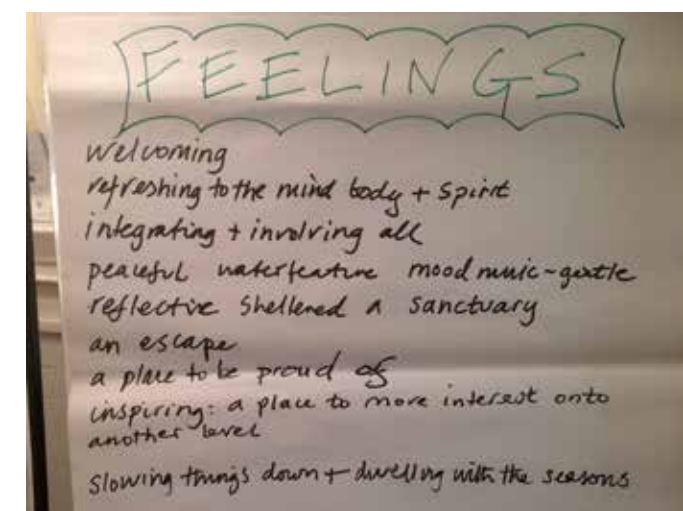
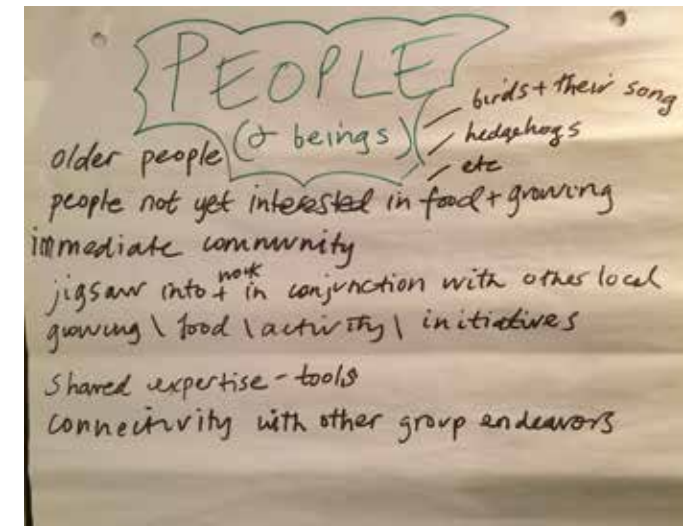
The Event

Both events were well attended, and those who came were generally very supportive of the project. Lots of suggestions were made as to what the new facility could contain and how it could link to and compliment other facilities in the area - as shown in the photographs of the suggestions board to the right and the suggestions map below.

Numbers:

Tuesday 16th December - 33 Attendees

Friday 19th December - 63 attendees



Pre-Planning Meetings

After the exhibition event, we continued to involve future building users in the development of the designs.

A meeting was held at John Archer Hall on 9th January 2015 with the community design team to look at more developed plans.

Plans were presented at large scale (1:50) and members of the design team were asked to imagine visiting the building once it was built - marking on the plan where they would go, what activities would take place, and what they might need to do this. In this way we were able to highlight any issues with the proposed plans, and make sure that all views were being taken into account.

Following this meeting, the proposals were developed in greater detail in collaboration with Squash Nutrition and the design team, and more detailed site investigations were carried out. A set of draft planning drawings were prepared, and these were in turn presented to the community design team on 20th February 2015 for agreement prior to the planning submission.

9. OPTIONS DEVELOPMENT

Following the site analysis and engagement process a number of options where drawn up for the site:

■	SHOP/CAFE
■	SHOP STORE
■	KITCHEN
■	WCS etc
■	TRAINING
■	OFFICE

Option 1



Pros:

- The activity is focused on Windsor Street, in the developable strip along the front of the site. This supports the development of Windsor Street as a significant secondary street in the city, and keeps the development as far away as possible from residential neighbours.
- The kitchens and other services can be shared between cafe and training space.
- The office is adjacent to the training space, allowing easy supervision.

Cons:

- The shop/cafe is at the furthest point from Upper Warwick Street, reducing its visibility from this approach, and its distance from the existing commercial activity on the other side of the junction on Windsor Street.

Option 2



Pros:

- Most of activity is focused on Windsor Street, in the developable strip along the front of the site. This supports the development of Windsor Street as a significant secondary street in the city.
- The kitchens and other services can be shared between cafe and training space.

Cons:

- The shop/cafe is at the furthest point from Upper Warwick Street, reducing its visibility from this approach.
- The office is in a quiet part of the site - but with greater impact on neighbouring existing and proposed residential properties.
- The office location may impact on adjacent trees.

Option 3



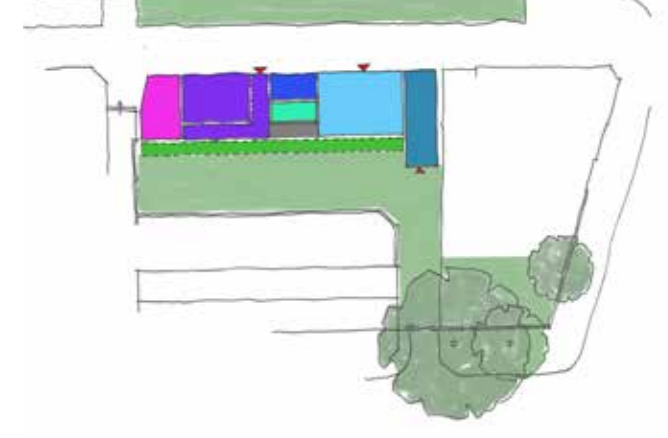
Pros:

- Most of activity is focused on Windsor Street, in the developable strip along the front of the site. This supports the development of Windsor Street as a significant secondary street in the city.
- The kitchens and other services can be shared between cafe and training space.
- The Shop/Cafe is moved to be nearer the junction with Upper Warwick Street, improving its visibility.

Cons:

- The office is in a quiet part of the site - but with greater impact on neighbouring existing and proposed residential properties.
- The office location may impact on adjacent trees.

Option 4



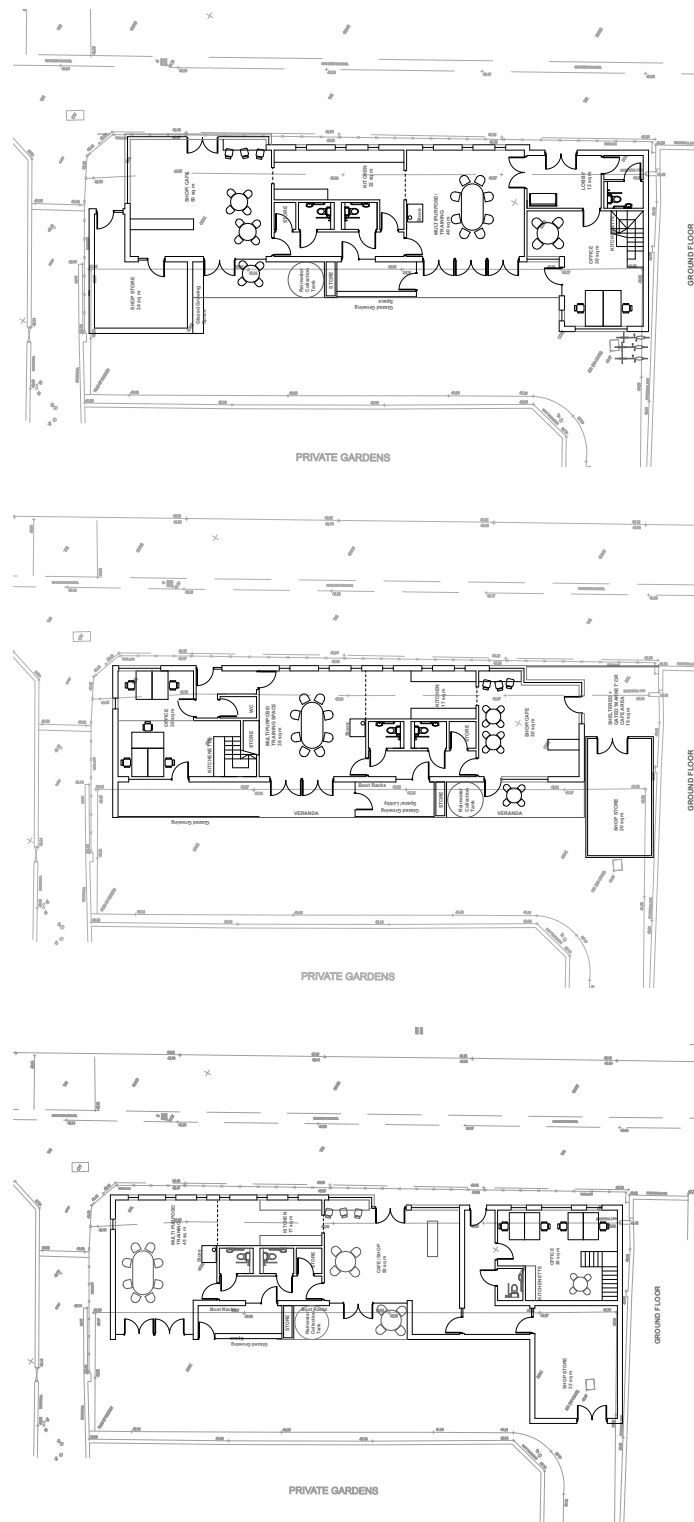
Pros:

- All of the activity is focused on Windsor Street, in the developable strip along the front of the site. This supports the development of Windsor Street as a significant secondary street in the city, and keeps the development as far away as possible from residential neighbours.
- The kitchens and other services can be shared between cafe and training space.
- The office is adjacent to the training space, allowing easy supervision.
- The Shop/Cafe is moved to be nearer the junction with Upper Warwick Street, improving its visibility.

Cons:

- The office staff may be more prone to disturbance from other building users.

10. REFINING THE OPTIONS



Building Plan

Following the initial options study, three options for the building plan were developed in more detail. These all focused development along the narrow strip onto Windsor Street. The decision was taken to avoid building on the small area on the corner of Upper Warwick Street and Luke Street due to the constraints here - namely the likelihood of damaging existing tree roots, and the close proximity of potential habitable room windows on the proposed adjacent apartment block on the corner site. This area would instead be designated a community garden.

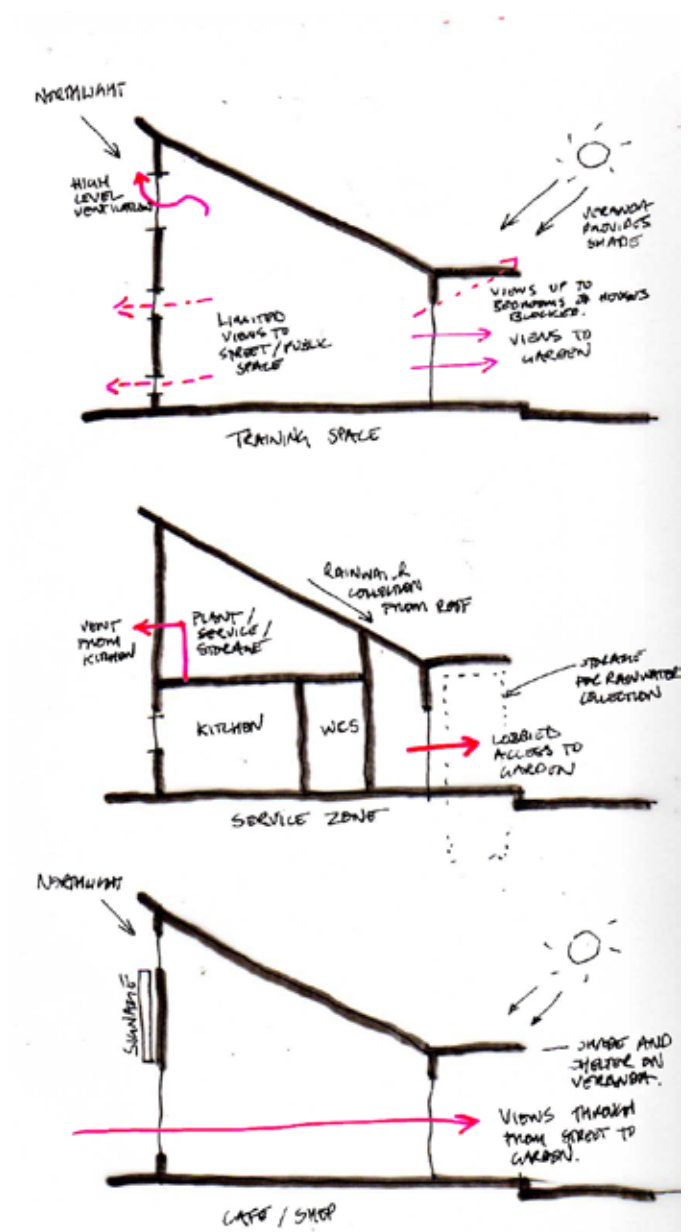
The three plans developed explored different options for the arrangement of spaces within the narrow building plot given - moving the shop from one end of the building to the other, and examining the relationship between the small office and other spaces.

From this exercise it was agreed that the shop should be located at the end of the building closest to the junction with Upper Warwick Street. This makes it as visible as possible for all of those crossing this junction. It also means that it is adjacent to a derelict property at present, or proposed bin stores/ cycles stores in the proposed apartment block - away from the residential properties further along Windsor Street. Instead the office is located at this end of the building. The other uses are arranged between these two, around a core of highly serviced uses in the kitchen and WCs.

Building Section

The section diagrams to the right show the proposed shallow plan depth (approx 6 metres), monopitch roof arrangement and veranda. This arrangement has a number of advantages:

- The narrow plan depth allows controlled views straight through the building.
- The monopitch roof minimises the scale at the rear of the building, reducing its impact on neighbouring residential properties. At the same time it gives more height on the Windsor Street elevation, re-inforcing the streetline.
- The increased height at the front of the building allows for generous ceilings in some spaces - such as the training space - while also allowing for storage and services in others.
- The south-west orientation of the monopitch roof provides a large area of roof, ideal for solar power. It also means that the roof drains towards the garden, allowing a significant amount of storage for rainwater collection on site.
- The inclusion of a veranda to the rear of the building provides a useful transition space between inside and outside. This is especially relevant given the community garden use of the rest of the site and the indoor/outdoor use.
- The veranda provides shading from high sun in summer, reducing solar gain and over-heating. It also restricts views upwards towards the bedroom windows of the properties on Luke Street, increasing privacy for the residents here.



11. CHOSEN OPTION

Designs for the final preferred option were drawn up into more detail. The diagram on the right shows the elements of the proposed scheme:

1. Main elevation onto Windsor Street

- Strong street line and welcoming presence
- Windows on north elevation from office - providing daylighting to office, and some supervision to Windsor Street.

2. Monopitch Roof

- Reduces impact on neighbouring properties compared with standard pitched roof.
- Area for rainwater collection
- South-west orientation suitable for future solar panels

3. Veranda

- Provides shading from summer sun
- Enhances privacy of properties on Luke Street by restricting view upwards
- Provides indoor/ outdoor transition area
- Provides south-west facing sheltered growing space

4. Green Roof to shop store

- Reduces surface water run-off and enhances biodiversity
- Increased biodiversity on the site

- Shop store lower structure to allow some late afternoon sunlight to hit south elevation of building and provide degree of separation from adjacent buildings.

5. Adjacent corner site

- Currently single-storey (formerly three-storey) derelict public house, but with permission for a 3-storey (9m) high residential apartment block.
- Apartment block would overshadow

southern most part of main site, making this ideal location for stores/ bin stores etc, adjacent to proposed similar uses in apartment block.

- There are no habitable room windows overlooking main part of site. However, proposed habitable room windows overlook small corner of site on Upper Warwick Street

6. South-west facing garden for growing and training facilities.

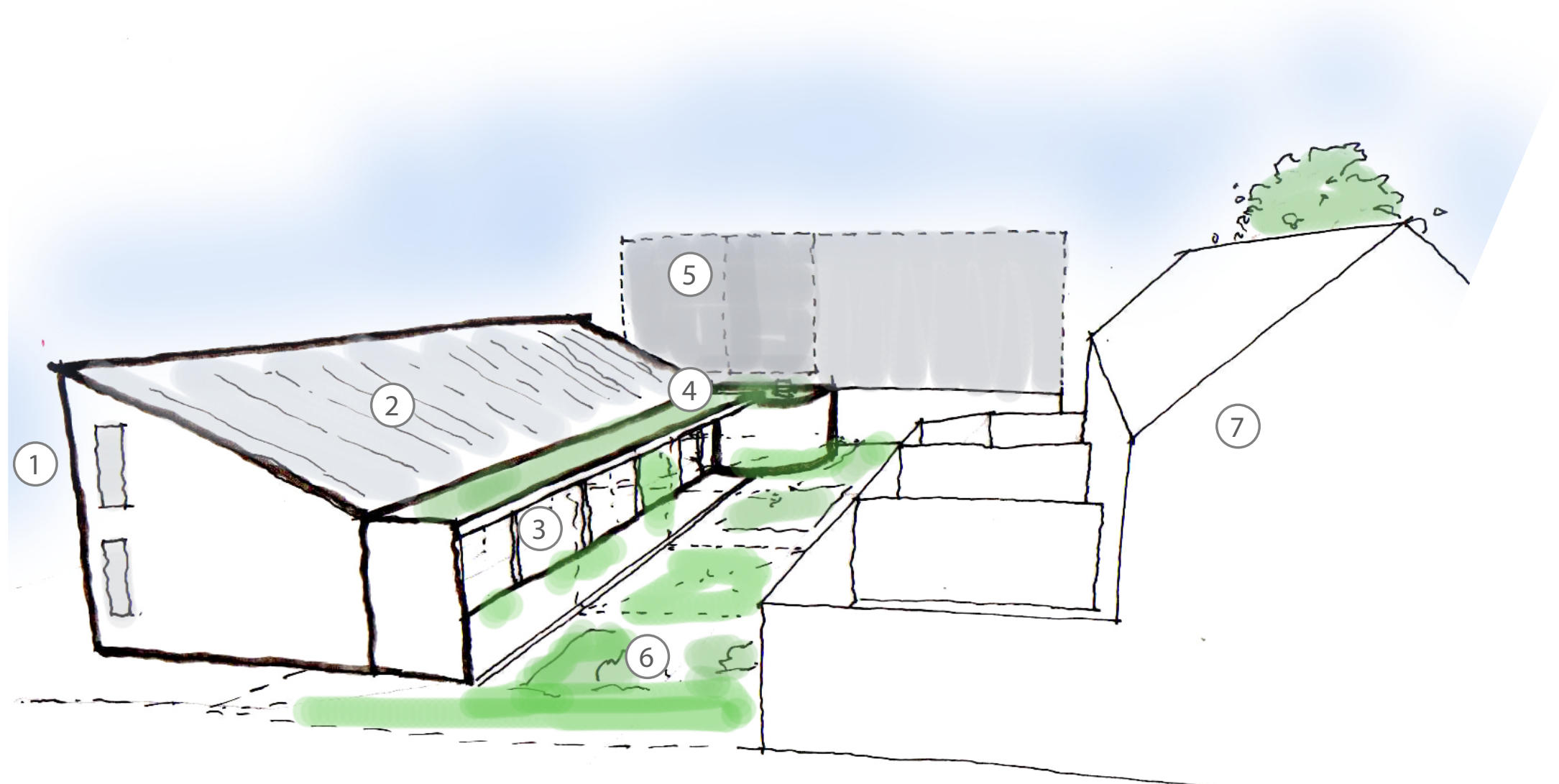
- Raised planters to be used here to

minimise issues of contamination or remediation of existing ground.

- All areas to be accessible to those with impaired mobility - site is relatively level throughout.

7. Neighbouring residential properties on Luke Street

- Aspect from 1st floor here improved. Currently overlooking derelict ground. Scheme proposes community garden and building.



Sun Path Analysis

A geo-located model of the chosen option was constructed, in order to analyse the effect of the proposal on shading around the site - in particular the effect on the adjacent existing residential properties. Outputs from this model are shown in the images to the right.

An initial analysis demonstrated that, due to the proposals's location to the north-east of the properties on Luke Street, the greatest likelihood of overshadowing occurred in the morning.

Testing the impact at the equinox, at the summer solstice, and in the middle of winter showed that there was no increased shading of the residential properties on Luke Street from the proposed building. Indeed, the only increase in overshadowing on the Luke Street properties occurs when the proposed adjacent apartment block is added to the model.

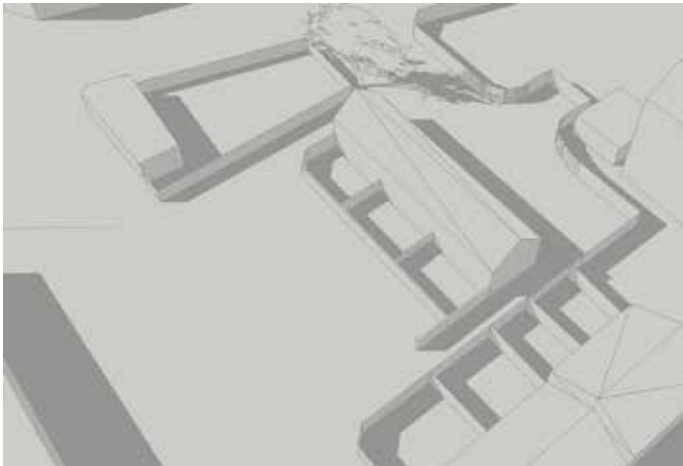
A small amount of additional shading is produced to the window nearest the end of the bugalow nearest Windsor Street to the north of the site, for approximately 1 hour in the middle of winter - from 9am to 10am. However, this is minimal when compared with the degree of overshadowing to this elevation produced at the same time by the proposed adjacent 3 storey apartment block.

Further outputs and animations from this model can be provided on request.

EXISTING



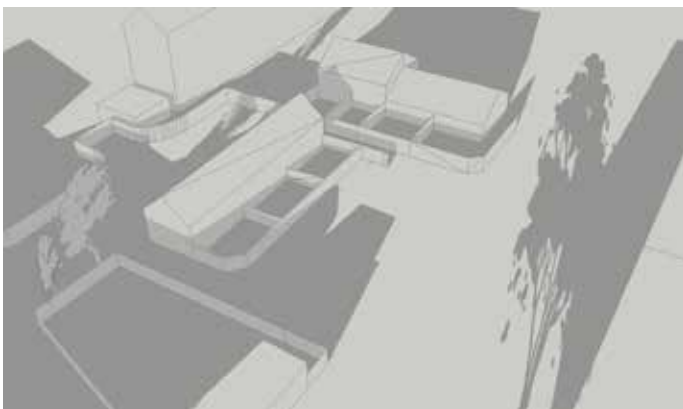
Equinox - 8am



Summer Solstice - 8am

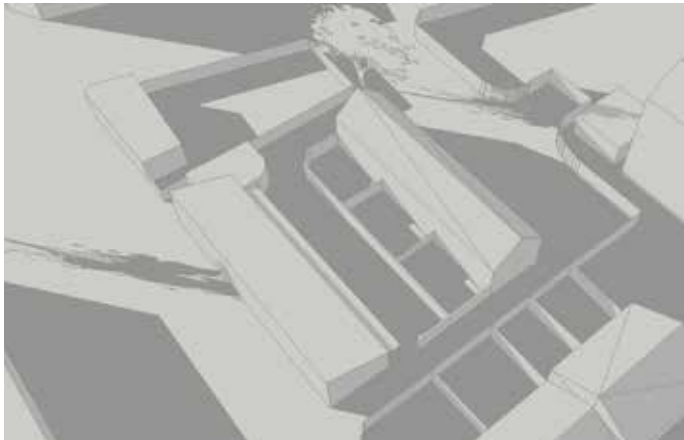


21 November - 9am

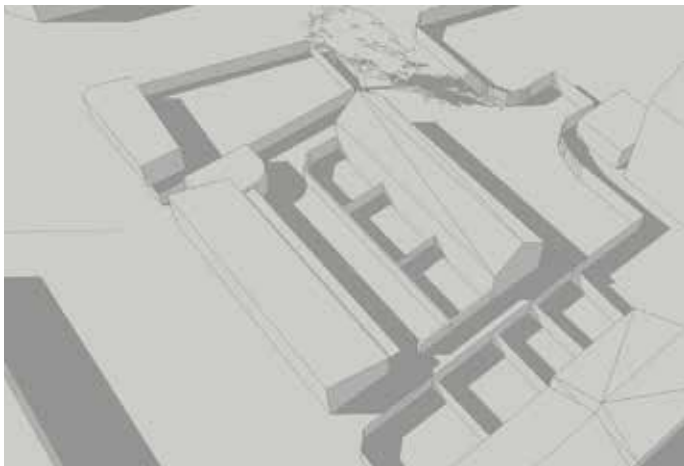


21 November - 9am

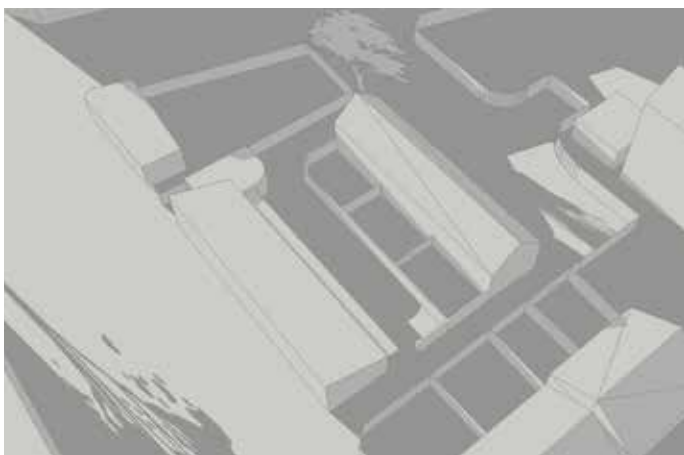
PROPOSED



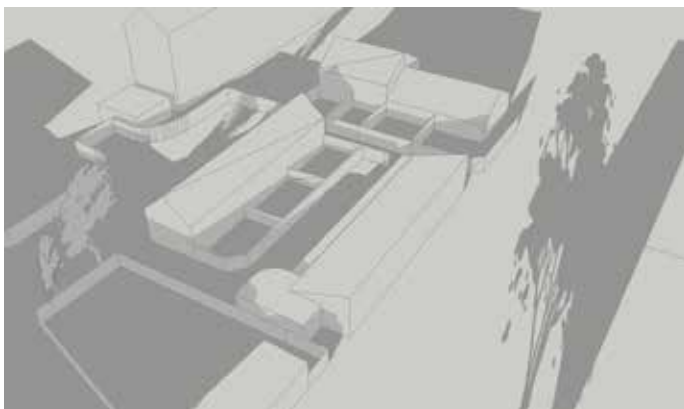
Equinox - 8am



Summer Solstice - 8am



21 November - 9am

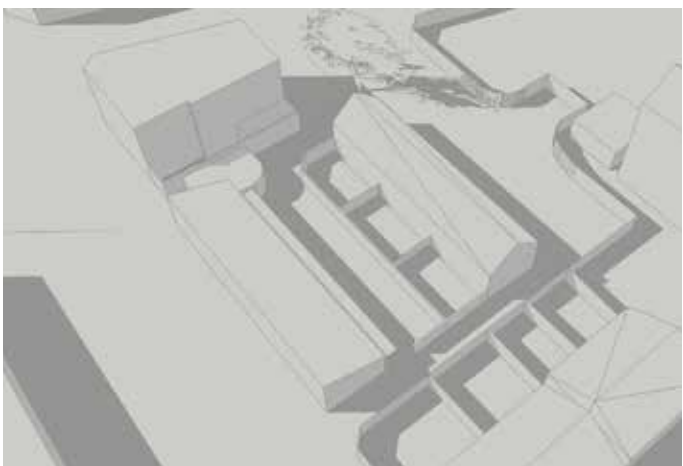


21 November - 9am

PROPOSED WITH APARTMENT BLOCK



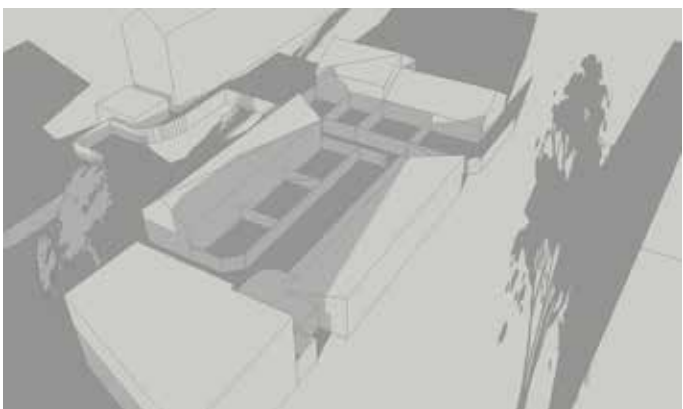
Equinox - 8am



Summer Solstice - 8am



21 November - 9am



21 November - 9am

Views and Street Facade

A key part of the brief was to make the building open and welcoming to all, with views into and through the building encouraged in the shop in particular.

To this end a large area of glazing has been provided to the shop front, with glazing at the rear of the building also affording views to the garden at the rear.

The training space is considered the next most 'public' area of the building. A folding glazed door is provided here, with the same at the rear. This allows this part of the building to open up fully to the street for events - for example the 'honey night' arranged annually by Squash Nutrition. (The plan layout allows other areas of the building to be secured when this happens). The glazing to the front facade here will be translucent and obscured in parts. This is so that when the doors are closed, activity within the building at this point will be evident but not highly visible, protecting the privacy of people inside the building taking part in workshops etc.

Other windows - the office and the kitchen areas - will start at a higher level of approximately 1.2m above finished floor level. This is to help protect the privacy of building occupants, whilst still allowing a person standing inside the building to see out to the street.

Materials and Appearance

Timber has been chosen as the main building cladding material for its warmth and tactile properties, but also its low environmental impact - all things which were discussed and highlighted by the

precedents examined during the design process. Care will be taken in the detailing of this to ensure longevity of performance and appearance.

The roof will be simply finished in standing seam metal. This is a robust material, which forms an ideal base for rainwater collection and the future potential addition of solar panels, which can simply be 'clipped on'.

Doors and windows will be factory finished timber to the rear and side elevations, and to the kitchen and office spaces. The larger openings to the shop and cafe and the training space may be aluminium framed, or aluminium clad timber frames.

Security

The building has been designed to have an open and welcoming aspect. However, we are conscious of the need to ensure the security of the building and its users. In developing the designs the aim has been to achieve this without creating a bunker-like appearance.

Windsor Street itself is a well used route, and this degree of activity should ensure a level of natural surveillance, reducing the need for intrusive security measures. The front elevation of the building is well overlooked, with entrances clearly visible from the street. The building itself forms the barrier along Windsor Street between the public and more private areas of the development. The rear of the building faces towards the rear of other properties, and is thus within the 'private' area of this block. The garden to the rear is surrounded for the most part by an existing 2 metre high brick wall - which forms either the party boundary with the rear of other properties

or, in a small area on the corner of Luke Street and Upper Warwick Street borders the public realm. In a small area alongside the existing public footpath between Luke Street and Windsor Street a new secure boundary fence and gate will be constructed.

All windows and doors throughout the building will be to Secure by Design or similar standards, with triple point locking and 6mm laminated outer panes of glazing as standard.

The large areas of glazing which form the shop front window and the training space window will have the additional protection of external security shutters. These will be integrated with the facade design, so they form part of the building rather than being 'stuck on'. When open they will form canopies to these areas - increasing the building's interaction with the public realm.

An additional 'concertina' style shutter will be used when the shop is closed to close off the recessed shop entrance area.

Landscaping

Landscaping works to the garden area within the site will be planned and undertaken by the Squash Nutrition and volunteers. The aim will be to create a welcoming and educational space, using a wide variety of planting to demonstrate the potential for growing fresh fruit and vegetables within a constrained urban site.

Planting will take place in raised beds, to limit the need for any remediate of the ground conditions and contamination. If any severe contamination is discovered during detailed site investigations it will be

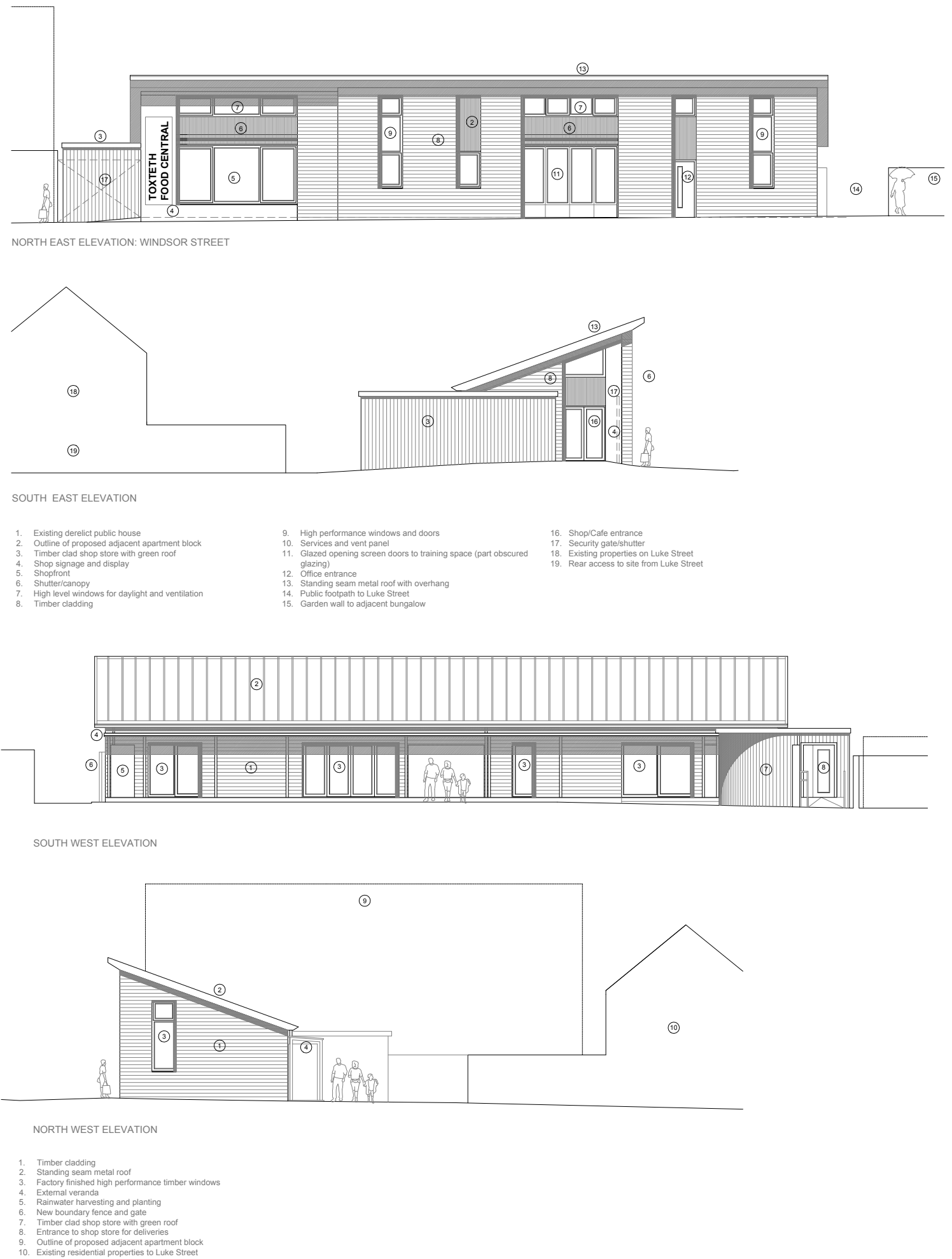
capped and/ or remediated in order to make the area safe for gardening and food growing, or those areas will be avoided in any planting scheme.



Images of the Grapes Garden on Windsor Street, which was planned and developed by Squash Nutrition and volunteers.



Above: Honey Night Market event, organised annually by Squash Nutrition on Windsor Street.
 Right: Elevation drawings - Part of formal planning drawing submission.



12. SUSTAINABILITY

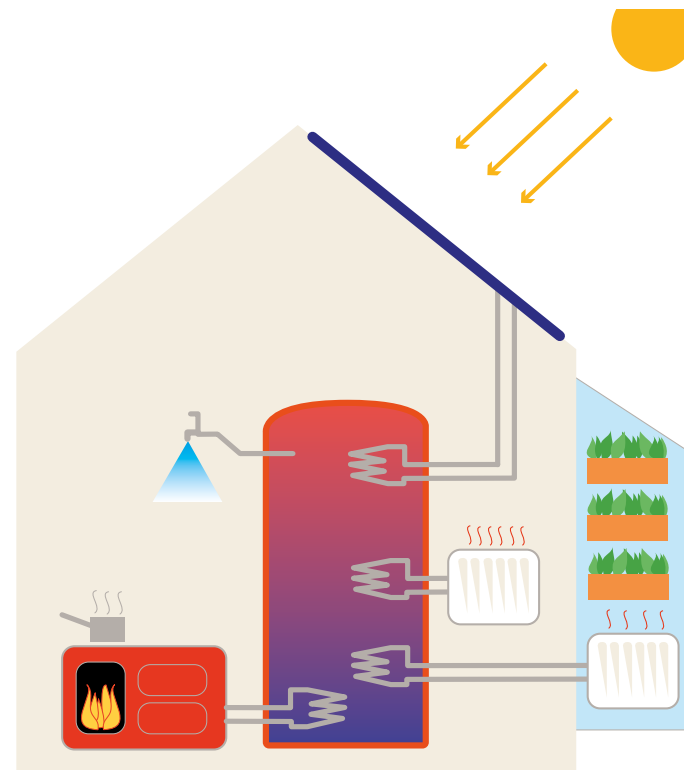
Energy Performance

A 'fabric first' approach has been taken to building design from the outset. The building will be highly insulated with an air-tight construction and high performance doors and windows - achieving a space heating demand of 40kWh/m².a (equivalent to the AECB Silver Standard) or less.

Though restricted by other site constraints, the long elevation to the south west has been extensively glazed, to allow solar gain from this aspect to contribute to heating the building during winter. Glazing to the north facade is driven by the need to provide views and/or daylight - with high performance glazing reducing heat loss.

Building services will be robust and efficient. As a small scale building for a community use, overly complex systems which may prove difficult to maintain will be avoided. Heating energy will be provided in the first instance by a highly efficient domestic scale condensing gas system boiler. This will feed into a thermal store, allowing other renewable heat sources to be added if available - for example from solar panels or a wood burning stove. All electric lighting in the building will be in the form of low-energy LEDs.

To further save energy, the main shop store is an unheated space outside the thermal envelope - reducing the material and servicing requirements of this part of the building. In addition a larder/cool store adjacent to the kitchen will reduce the need for electricity for refrigeration.



The diagram above shows the potential for the 'future proffed' heating system in the building to be supplied by a variety of renewable heat sources - including a (Clean Air Act compliant) woodburning cooking stove.

Thermal Comfort and Indoor Air Quality

The thermal comfort and health of the building occupants is a key objective of the building's design. For most of the year, most of the building will be naturally ventilated by occupants opening windows and doors - especially for example during workshops that move between inside and outside spaces. As the users will be moving between inside and outside frequently,

with doors to the garden standing open, a heat recovery ventilation system would be unlikely to be efficient. Instead, a mechanical extract ventilation system will be installed, primarily to extract stale air from the serviced spaces at the centre of the building - the kitchen and WCS - but also with controlled supply of fresh air to the other spaces in the building.

The high levels of insulation and air-tightness should ensure thermal comfort in the winter months. The presence of solar shading and high level openings for ventilation should help avoid any over-heating issues that might otherwise be experienced in summer.

Materials

Materials will be chosen to be robust and have low environmental impact with minimal requirement for maintenance. Materials with minimal processing and recycled content will be preferred to those requiring a high degree of manufacturing input or derived from the petrochemical industry. Materials with low VOC content will be specified as finishes to internal spaces, to help protect the health of occupants.

Water

Low flush and low water use appliances will be specified throughout, to minimise the use of mains water. The efficient planning of services within the building, concentrated in a central serviced area, means reduced 'dead-legs' and the need to run taps for long periods to get hot water.

Rainwater will be collected from the roof of the building. This will be used to water the garden and growing areas - with sufficient roof area and storage available such that no mains water will be required for this use.

In addition, we are exploring the possibility of supplying some of this rainwater for flushing toilets in the building.

See drainage section (13) for a discussion of surface water treatment.

Waste and Recycling

As the function of the building is concerned with sustainability and healthy eating, most food will be cooked from scratch, producing a minimal amount of packaging waste. Building users will be encouraged to reduce the amount of waste they produce, before potentially then recycling or composting items.

A large bin store will be provided on the site, allowing for easy separation of recyclables from general waste. This is located at the southern end of the site, which is shaded by the existing wall, and will be further shaded if the adjacent apartment block is constructed.

Composting will also take place on the site, in a secluded area of the community garden, though with some sun required to assist the composting process. This will take both garden waste and waste from food preparation and some packaging in the building. The compost produced will in turn be used on the community garden and may also be used on other Squash Nutrition sites along Windsor Street.

Day-lighting

A daylighting model has been created for the scheme. This has informed the design, in particular the choice of window locations and orientations. Images to the right are taken from this model. Fromclockwise from top left: Shop/Cafe, Kitchen, Training Space, Office.

The offices, training space and shop and cafe have all been designed to achieve an average daylight factor of 5% or above. This means these spaces will be naturally daylit throughout the year, This will make these more pleasant and welcoming spaces to be in - whilst also reducing running costs for the building by reducing the amount of electricity required for lighting.

The kitchens and lobby spaces have been designed to achieve an average daylight factor of 3% as a minimum. This should mean they are naturally daylit from March to October, with some requirement for supporting artificial lighting from October to March. Storage spaces and WCs have been designed without daylighting - on the basis that these spaces are used intermittently by people, and this allows for a more thermally efficient plan form.



Right: Bee keeping demonstration in L8 - gardening and growing activities will support biodiversity in the surrounding area.

13. SITE CONDITIONS

Ground Conditions and Contamination

As previous uses on the site have been identified as housing and then domestic garages, there is no suggestion that there would be contamination on the site associated with heavy industrial uses.

The present ground conditions, which include concrete hard standing in parts of the site left over from previous structures, may have an effect on foundation design. A ground condition survey has been commissioned to establish details.

A report will be made available during the consultation period.

Drainage

At present there are site drains which run towards Luke Street. There is also a manhole within the site, although it is in a poor state and currently full of rubble.

The proposals include constructing a new manhole which would be located adjacent to the Luke Street site entrance, to connect with the existing manhole on Luke Street to take both foul drainage and any residual surface drainage.

To help minimise surface water run-off, and lessen the demand on the existing sewer network, the proposals will incorporate a number of components including:

- Rainwater harvesting to collect water from the main roof - this would then be used to water the garden areas;
- A green roof above the store room to reduce run-off;
- A significant amount of planting across the site;

These should all act to significantly reduce the amount of surface water run-off, especially in comparison to the state of the site at present, which is mostly hard-paved with no soakaways.

14. ACCESS AND PARKING

Walking and Cycling

The site is close to residential neighbourhoods and existing services, where most of the 'footfall' for the building is expected to come from. It is therefore expected that a high proportion of people visiting the building will arrive on foot.

The site also lies on a well-used cycle route to the city centre, producing further 'passing trade'. If demand arises, there is sufficient pavement width to provide visitor cycle parking within the public realm to front of building which is well overlooked by shop/cafe.

Many of the current volunteers and workers for Squash Nutrition live within cycling distance of the site and use bikes to get to their current office at John Archer Hall.

Six covered bike parking spaces will therefore be provided to the rear for staff/volunteers and those using the building for longer periods - in line with Planning Guidance.

Public Transport

The site is located on a number of well used, reliable and frequent bus routes, with three bus stops within 200m of the site covering routes across the city.

Private Vehicles

Windsor Street can accommodate on-street parking and four spaces have been shown on plans as visitor parking. These spaces are a safe distance from the junction and do not obstruct access to the fire station opposite.

Two parking spaces are proposed at the site entrance from Luke Street, these would be used for staff members.

The parking requirements are in line with Planning Guidance, taking into account the mix of uses on the site.

Deliveries

Stock deliveries to the shop and the removal of waste will primarily happen via the rear entrance on Luke Street. Some complimentary deliveries may also be accommodated on Windsor Street via the main shop/cafe entrance.

Inclusive Design

The building has been designed to be accessible to all - and throughout the design process, consideration has been given to how those with impaired mobility and/or vision as well as parents with small children and prams, would use the building:

- There is level access to the building throughout, including level thresholds, with some small ramps provided to accommodate slight changes in levels at the rear of the building.
- The door widths and arrangements have been designed to allow access for those with wheelchairs and prams.
- A unisex and accessible WC has been provided
- A dedicated and pleasant to use baby changing facility has been provided
- Detailed design of finishes will achieve the required levels of contrast etc to accommodate those with visual impairments.

15. SUMMARY

In conclusion, the Toxteth Food Hub has been designed to incorporate a range of uses in a sustainable way. A summary of elements of the scheme is provided in the table below:

Element	Summary	Map Reference
Design		
Use	<p>The site will be used to house a community hub and garden. The building will include:</p> <p>A community shop selling affordable fresh food and produce (A1)</p> <p>A community cafe and kitchen (A3)</p> <p>Classrooms for training (D1)</p> <p>A small office (B1)</p> <p>An outdoor community garden</p>	
Amount	<p>The site is 605 sq m.</p> <p>The building occupies a footprint of 230 sqm. The gross floor area created is 220sq m. It is single storey with a small amount of mezzanine level space.</p>	
Layout	<p>The building is positioned in a long narrow strip along the front of the site to Windsor Street, providing an active frontage to the site.</p> <p>The building occupies the developable area of the site, with a 12m separation distance from the adjoining residential properties to the veranda, 13.5m to the main facade of the rear of the building.</p> <p>The garden occupies the areas of the site which are not built upon, creating productive and attractive greenspace. Planting will be mostly in raised beds to avoid the need for extensive remediation and removal of materials from the site.</p>	
Scale	<p>The building presents a 2 storey elevation along Windsor Street, with a single storey elevation to the rear.</p> <p>This is in keeping with the two and three storey residential and commerical properties along Windsor Street, re-inforcing the street line, whilst reducing the building's impact on the neighbouring residential properties to the rear.</p>	
Landscaping	<p>Landscaping will be carried out in the community garden to the rear and in the small area of the site on the corner of Luke Street and Upper Warwick Street by the building users. This will consist mainly of raised beds for growing a variety of plants and produce. Other than controlled views through the building, itwill not be highly visible from either main street and as a result will have the feel of a walled garden.</p>	

Element	Summary	Map Reference
Appearance	<p>The building will have an open and welcoming appearance. High quality materials will be used throughout, and the building itself will be augmented with areas of planting and shop displays.</p> <p>External Walls: Most of the external walls will be clad in timber. Small alreas of alternative materials such as glazed bricks and tiles will be used to highlight the shop entrance area.</p> <p>Roof: The roof of the main building will be robust standing seam metal. The roof of the store will be an extensive sedum matt (green roof). The roof of the vernada will alternate between open, glazed and opaque metal sections.</p> <p>Windows and Doors: Windows and doors will be high performance throughout, a mix of timber with factory finish, aluminium and aluminium clad windows will be used as appropriate to the location.</p>	
Access		
Vehicular and Transport Links	<p>The site is in a highly accessible location adjacent to bus routes and cycle routes.</p> <p>Pedestrian visitors will access the site from Windsor Street, with alternative access for staff and deliveries provided to the rear off Luke Street.</p> <p>Given its location, most visitors and staff are expected to arrive by foot, cycle or public tansport. However a small amount of staff car parking will be provided on the site, accessed via Luke Street. Visitors arriving by car will be able to to the front of the building on Windsor Street.</p> <p>Many of Squash's staff arrive by bike to work, so adequate secure bike parking will be provided within the site. If demand is sufficient, visitor Bike Parking may be provided on Windsor Street, as the pavements here are sufficiently wide.</p>	
Inclusive Access	<p>The site will be level access throughout, with level thresholds and ramped access where this is not possible. All necessary facilities are provided on the ground floor. The interior fit-out of the building will also consider those with visual and other impairments.</p>	



URBED

5th Floor

10 Little Lever Street

Manchester

M1 1HR

0161 200 5500

www.urbed.coop