



Planning Proof of Evidence Appendices

Land at Patshull Road, Albrighton

On behalf of Boningale Developments Limited

LPA Reference: 24/02108/OUT

Appeal Reference: 6007402

Appendix MW1 – Enterprise EV Car Club Proposal



Car Club proposal for Boningale Homes & Marrons

December 2025



Enterprise Car Club - Introduction

Who are we?

Enterprise Car Club is an hourly, self-service car rental company, available to members 24/7/365. Vehicles can be picked up in and around a city or region and booked in advance or at the last minute. Located in over 220 UK cities and communities our 125,000+ members have access to over 2,500 cars and vans.

Enterprise Mobility is the parent company of Enterprise Car Club. A car club is a natural extension of the local car-rental service that Enterprise Rent-A-Car has pioneered in the UK over the last 20 years.



Why Enterprise Car Club?

Enterprise Car Club will be able to provide new communities with a wider variety of vehicles backed by the Enterprise Rent-A-Car neighbourhood network and award-winning customer service.

Enterprise Car Club already hosts over 200 vehicles at developments across the UK. These range from City Centre residential developments in London and major regional cities (e.g., Manchester, Leeds, Bristol, Edinburgh, Glasgow, and Newcastle), to mixed use developments, business parks and non-city centre locations on the fringes of cities or outside major conurbations.

What role does shared mobility play in developments?

The mobility decisions and behaviour of residents of new developments/communities (business or private) are influenced by their mobility needs in and around their new location, but also across the region and country. A good range of mobility solutions in one and not the other risks travel behaviours remaining focussed on vehicle ownership and far lower adoption of more sustainable and multi-modal options.

Enterprise has an already established and rapidly expanding national car club and car rental network providing shared mobility from Inverness to the Isle of Wight, Northern Ireland to East Anglia. Large urban centres are covered but towns and smaller communities are also now served by Enterprise Car Club and Enterprise Rent-A-Car. By the time this new development starts to be occupied mobility solutions from Enterprise will be available across the UK integrated physically and digitally alongside other sustainable modes such as public transport, active travel, and shared mobility options. Enterprise Car Club already has vehicles within 500 metres of 181 UK train station. These stations represent 34% of UK national rail journeys.

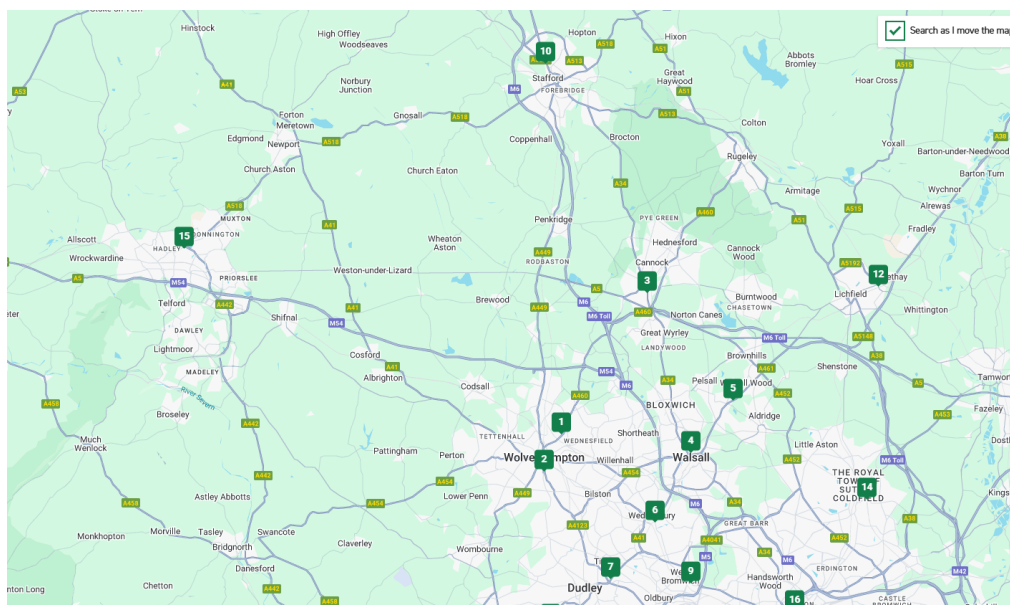
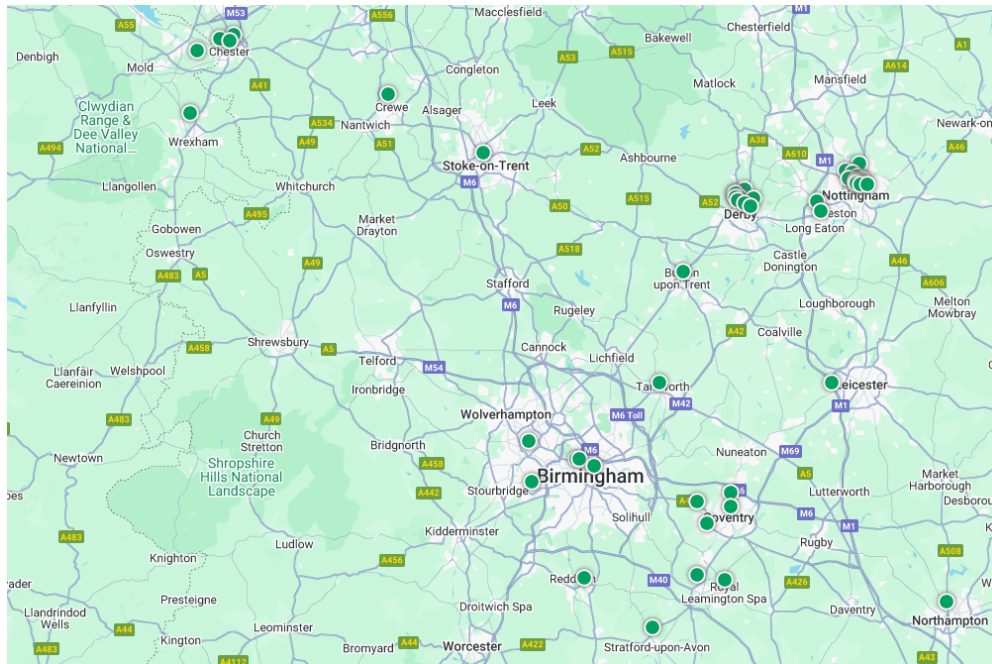
How does Enterprise provide an alternative to car ownership?

Enterprise Car Club is integrated with Enterprise Rent-A-Car as a brand, business, and proposition for residents of the development. This means that personal members of Enterprise Car Club will receive a discount with Enterprise Rent-A-Car and can access all its services in the immediate area around the development and across the UK. Together this integrated approach provides the most powerful alternative to car ownership for individuals and businesses.

Enterprise in the area around South Staffordshire / Shropshire.

Enterprise Car Club has a presence in South Staffordshire and Shropshire. Discussions are ongoing to expand this in partnerships with councils, train operators and developers. This car club presence is supported by a strong branch presence (see second map below) and Enterprise also has “[month or more](#)” and commercial vehicles options in the region via [Enterprise Flex-E-Rent](#) Shrewsbury.

Combined, these options make Enterprise the best possible mobility partner for the Shropshire community whether residents need a car for a few hours, days or months.



The National Car Club

Boningale Homes residents will also have access via their Car Club membership to over 2,500 vehicles across the UK.



The map below shows the current Enterprise Car Club network which is expanding rapidly. Residents who join Enterprise Car Club can use any of these vehicles and if bookings are cancelled more than 5 hours in advance there are no charges. Enterprise locates car club vehicles with public transport in mind enabling members to travel in combination with public transport and only driving for the smallest possible portion of the journey. One example of this is Enterprise Car Club's presence along the LNER network connecting York to Darlington, Durham, Newcastle, Berwick-upon-Tweed, and Edinburgh to the north and Wakefield, Doncaster, Newark, Peterborough, and London Kings Cross to the south.



Car Club Proposal for Albrighton South, Shropshire, WV73BJ

Given the scale of the development (circa 800 homes) and the planning requirements we advise the following:

Proposal	Proposal Details
Minimum Car Club	We would recommend 3 vehicles on a 2-Year fixed contract. This is to seed-fund the car club. By the end of the contract term we expect the car club's to be self-sustainable. Possible phased approach of 3 vehicles pending occupancy and growth of the site.
Vehicles provided	EV's can be supplied provided correct charging infrastructure with minimum 7kw charging in place. All vehicle maintenance and cleaning responsibilities will be carried out by Enterprise.
Total cost	£12,000 per annum ex VAT for EV. Due to the extensive marketing by Enterprise which would grow local engagement, this would be required for a maximum of 2 years by which point the vehicles will be self-sufficient.
Additional vehicles	Will be provided when commercially viable to do so at no additional cost. Enterprise and the client will develop a utilisation model which will trigger additional vehicles in response to demand. This model will consider utilisation levels above 40% and the distribution of demand across the week and working week. If you wish for a larger car club fleet on site when the above model does not deem it commercially viable, additional vehicles can be provided at £10,000 ex VAT for non-EV or £12,000 ex VAT for EV.
Incentive for site only residents	2 year's free membership (a saving of £60 per membership, per annum) of Enterprise Car Club and £50 drive time credit.
Offer qualification	Will be provided to multiple residents at the same address and throughout the contracted period.
Additional benefits	All residents joining will be entitled to a 10% discount with Enterprise Rent-A-Car. The combination of car club and car rental is very attractive to people as an alternative to car ownership. This would be promoted via a leaflet customised to the offer (see below example), via digital/social media marketing and events. Car Club members holding both a corporate and personal membership can link their accounts, so they can have a single sign on to the car club booking system.
Corporate membership	Any Businesses located at the development site will be provided with free Enterprise Car Club membership for themselves and their employees.

Promotion	Attendance at sales and promotional events
Data	Creation of reports and statistics for the developer and council.

One Enterprise and Future Mobility

Car Club usage can be supported and supplemented by traditional car rental (typically for longer journeys) via a local branch and the free “We’ll pick you up service” or a delivery service to the apartment block. One-way hires are available via the traditional Enterprise Rent-A-Car network.

Globally, Enterprise is at the forefront of new mobility solutions and over \$2 billion has been invested in a variety of businesses and technologies that will be critical in solving many of the current and future mobility challenges.

Everything we do, we do with our Standard of Care. We promise to put you first, with exceptional customer service and vehicles that are maintained to our high-quality standards. We’re continuously innovating to help move the world forward—including new ways to go the extra mile for you, so you can get on the road with confidence, no matter where life takes you. To make this promise a reality, our service is guided by our Standard of Care. See below for more details.



No-Touch Transactions

We want your rental process to be as intuitive and easy as possible. So, we’re increasing our efforts to provide no-touch digital tools that provide less contact without sacrificing service.



Exceptional Customer Service

Great customer service starts with listening. We take the time to understand your needs, so we can offer the best solution. This attention to our customers is what has made us a global leader in mobility. Customers come to us—and stay with us—because we always strive to deliver an exceptional digital experience.



Vehicle Maintenance & Safety

Nothing is more important than the safety of our customers. We follow or exceed manufacturer guidelines for tire replacement and oil changes to help ensure your experience is safe and uninterrupted.



Visual Inspection of Every Vehicle

As part of our Standard of Care, we provide members with guidance and tools to perform a visual inspection before each trip. This extra step includes documentation of the vehicle condition before each rental, offering you peace of mind so you can be focused on the road ahead.

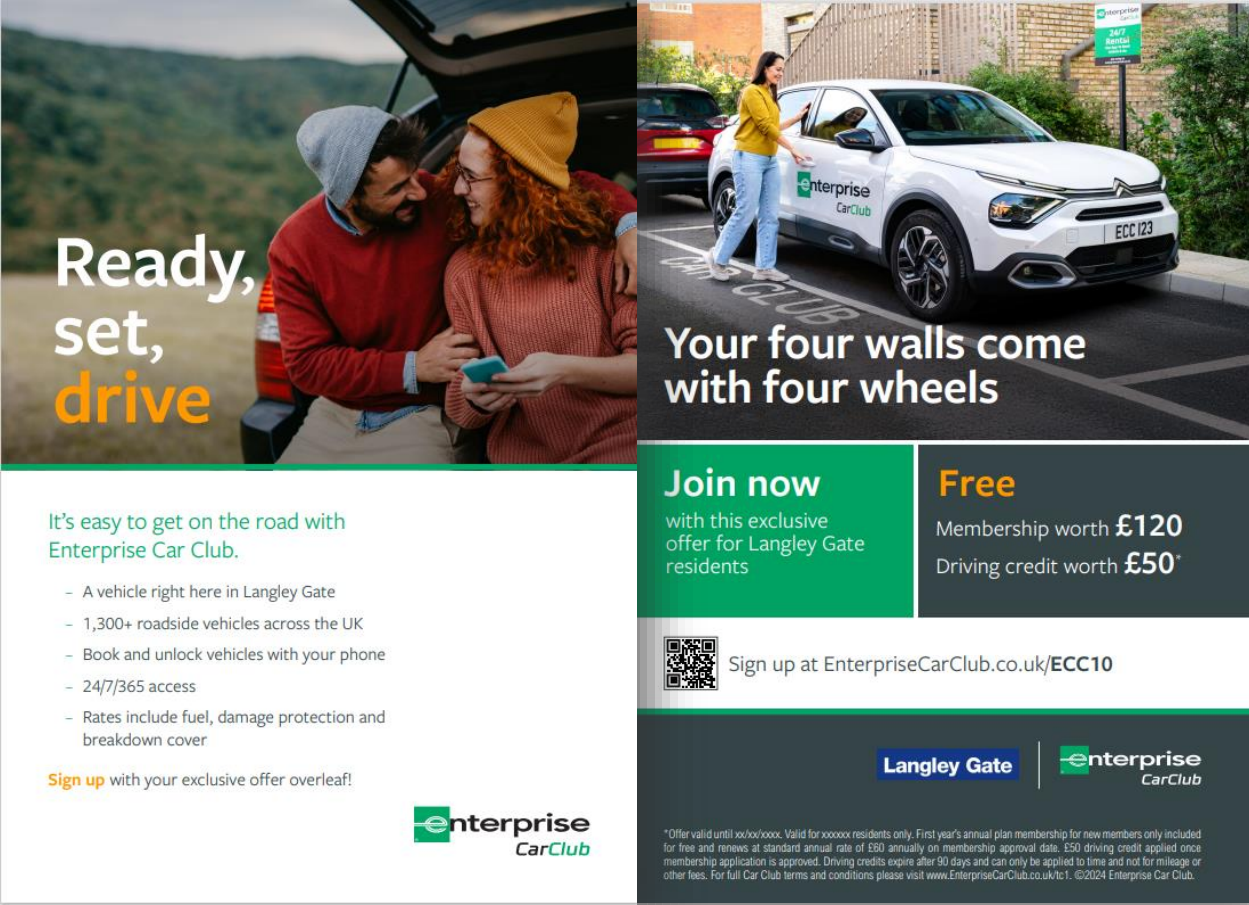


Member Compliance with Car Club Code

Car Club requires members to be community-minded as they make use of our shared vehicles in line with the **Car Club Code**.

Example Marketing Collateral

A range of comms can be shared with developers once onboarded. Including print/digital flyers (example below), emails, social posts & intranet copy.



The flyer is a two-page spread. The left page features a couple in a car with the headline 'Ready, set, drive' and a list of benefits. The right page shows a white Enterprise Car Club car with the headline 'Your four walls come with four wheels' and details about a free membership and driving credit offer. Both pages include the Enterprise Car Club logo and a QR code for sign-up.

Ready, set, drive

It's easy to get on the road with Enterprise Car Club.

- A vehicle right here in Langley Gate
- 1,300+ roadside vehicles across the UK
- Book and unlock vehicles with your phone
- 24/7/365 access
- Rates include fuel, damage protection and breakdown cover

Sign up with your exclusive offer overleaf!

enterprise CarClub

Your four walls come with four wheels

Join now
with this exclusive offer for Langley Gate residents

Free
Membership worth **£120**
Driving credit worth **£50***

 Sign up at EnterpriseCarClub.co.uk/ECC10

Langley Gate | **enterprise CarClub**

*Offer valid until xx/xx/xxxx. Valid for xxxxxx residents only. First year's annual plan membership for new members only included for free and renews at standard annual rate of £60 annually on membership approval date. £50 driving credit applied once membership application is approved. Driving credits expire after 90 days and can only be applied to time and not for mileage or other fees. For full Car Club terms and conditions please visit www.EnterpriseCarClub.co.uk/tc1. ©2024 Enterprise Car Club.

Appendix MW2 – Care Home Expression of Interest

01 October 2025

PRIVATE & CONFIDENTIAL

Mr Dean Trowbridge
Boningale Homes Limited
Longhouse Office
56 High Street
Albrighton
WV7 3JH

Dear Dean,

RE: EOI – Care Opportunities

Following recent email correspondence with Keon Homes' Managing Director, Richard Williams, please accept this letter as confirmation of our interest in your two care development opportunities that currently have planning applications submitted, validated, and are awaiting determination. The sites of interest are as follows:

- Patshull Road, Albrighton, Shropshire
- Heath House Lane, Codsall

As you are aware, Keon Homes are Midlands based and a subsidiary of the privately-owned, highly successful regional company Tara Group. Further information and our current developments can be found at www.keonhomes.co.uk. Alternatively, I would be happy to provide this information directly upon request.

We wish you every success in progressing these sites through the planning process and look forward to receiving updates on their determination status in due course.

Please feel free to contact either myself or Richard directly should you wish to discuss this further.

Yours sincerely,



Owen Williams

Land Manager

07483 089014 / owenwilliams@tara-group.co.uk

Appendix MW3 – Letter of Interest from Sainsburys and Email from Coop

Lizzie Smith

From: Megan Wilson
Sent: 18 August 2026 10:28
To: Lizzie Smith
Subject: FW: Albrighton

Megan Wilson
Planning Director

D 0114 478 6599
M 07970 258 102
E megan.wilson@marrons.co.uk

Main T 0114 478 6599

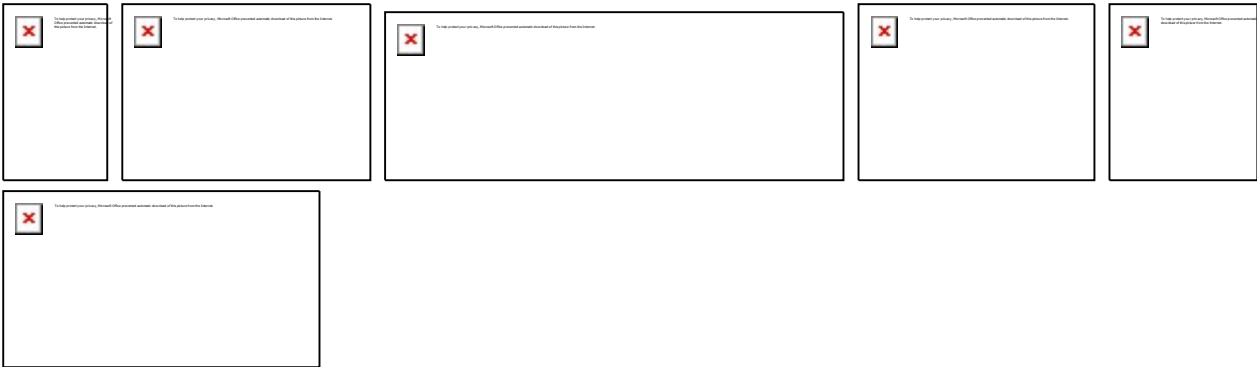


Marrons
Cubo, 38 Carver Street, Sheffield, S1 4FS
DX 701873 Sheffield 5



 *I'm empowered to work in ways that best suit the needs of our clients, colleagues and life, be that email, phone, video or in-person - which means I may work outside of traditional business hours. I do not expect that you will read, respond to, or action this email outside of your usual working pattern.*

 *As a sustainable business, we try to minimise paper use so please use email where possible - although signed original documents should be returned as instructed.*



FRAUD PREVENTION

Please do not reply to or act upon any email you might receive purporting to advise you that our bank account details have changed. Please always speak to the lawyer acting for you to check any changes to payment arrangements. We will also require independent verification of changes to any bank account to which we are asked to send money.

From: Dean Trowbridge <dean.trowbridge@boningalehomes.co.uk>
Sent: 18 August 2026 10:17
To: Megan Wilson <megan.wilson@marrons.co.uk>
Subject: Re: Albrighton

This Message originated outside your organization.

From: Craig Wighton <Craig.Wighton@midcounties.coop>
Date: Thursday, 7 August 2025 at 11:33
To: Dean Trowbridge <dean.trowbridge@boningalehomes.co.uk>
Subject: Re: Albrighton

You don't often get email from craig.wighton@midcounties.coop. [Learn why this is important](#)

Hi Dean,

Thank you for getting back to me

We would look to trade both stores, as we see this as a separate catchment to our existing store

Can you send me your plans for the local centre/commercial element

Thanks

Craig Wighton
Acquisition Manager

 [01926516000](tel:01926516000)

 [07710916078](tel:07710916078)

 Craig.Wighton@midcounties.coop

 Co-operative House, Warwick Technology Park, Warwick, CV34 6DA



The Midcounties Co-operative

This email is security checked and subject to the disclaimer [here](#)



From: Dean Trowbridge <dean.trowbridge@boningalehomes.co.uk>
Sent: 07 August 2025 10:17
To: Craig Wighton <Craig.Wighton@midcounties.coop>
Subject: Re: Albrighton

Hi Craig

Apologies for the delay in our response, I wanted to wait until we were in a more secure position with the application before discussing.

We are currently inviting expressions of interest on the proposed commercial element on the site if you are still interested.

Given a Co-Op already exists in Albrighton, we would also like to understand what would happen to the store on the high street if we were to proceed.

Kind regards,

Dean

Sent from my iPhone

On 12 Mar 2024, at 13:38, Craig Wighton <Craig.Wighton@midcounties.coop> wrote:

You don't often get email from craig.wighton@midcounties.coop. [Learn why this is important](#)

Hi Dean,

I'm the Acquisition Manager for the Midcounties Cooperative Society

The purpose of my email today is regarding the proposed new residential development in Albrighton

I appreciate that this an early stage planning wise, but I would welcome the opportunity to discuss your plans for the commercial element in more detail

Unfortunately, I couldn't attend the community development workshop on the 5th March but I do think use as a community retailer would support your application going forward

Please feel free to call me to discuss in more detail

Thanks

Craig Wighton
Acquisition Manager

<image001.png> [01926516000](tel:01926516000)

<image002.png> [07710916078](tel:07710916078)

<image003.png> Craig.Wighton@midcounties.coop

<image004.png> Co-operative House, Warwick Technology Park, Warwick, CV34 6DA

<image005.png>

[<image006.png>](#)

The Midcounties Co-operative

This email is security checked and subject to the disclaimer [here](#)

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Please consider the environment before printing this email

Sainsbury's Supermarkets Limited

Neighbourhood Hub (6k, 10k & 15k stores)

Developer's Brief and Outline Shell Specification

For

**Store shell, car park,
service yard and access roads**

07/11/23

Document Revisions and Updates

Issue No.	Issue Date	Description	Drafted By	Approved By
v1.0	24 th March 2021	WIP issue for current live projects. Based on latest SAG spec amended to suit Neighbourhood "Model 6" store design by HCD; GDP; SVM & Wave Note, this document brief excludes the following which should be extracted from the main store briefs where required for live projects: - Mezzanine floors Rooflights Sprinkler installation Roof plant/ mezzanine plant GOL facilities Decked car parks/ multi-level sites PFS	D. Fitzwater	S. Bostock
v2.0	7 th November 2023	Specification expanded to cover latest 5k, 10k and 15k hub stores based on models issued. 6k – HCD 2020-071 Generic 6k model Rev 8 10k – HCD 2020-071 Generic 10k model Rev 7 15k – HCD 2020-071 Generic 15k model Rev 6 Incorporating comments from SSL (NS, SB) HCD, SVM, Henry Riley) Sprinkler requirement removed (except enclosed yards or covered car parks)	D Fitzwater	Neil Sampson

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- 2.0 GENERAL REQUIREMENTS, APPROVALS & CONSENTS**
- 3.0 DESIGN PRINCIPLES & GENERAL REQUIREMENTS**
- 4.0 GENERAL CONSTRUCTION SPECIFICATION**

APPENDICES

- A PROJECT REQUIREMENTS**
- B INCOMING STATS SCHEDULE**
- C MODEL STORE DRAWINGS – 6K STORE**
- D MODEL STORE DRAWINGS – 10K STORE**
- E MODEL STORE DRAWINGS – 15K STORE**

1.0 INTRODUCTION

- 1.1 This document describes the works which the developer is required to provide as part of the Agreement for Lease (AFL) with Sainsbury's Supermarkets Ltd (SSL) and relates to the neighbourhood supermarket building shell, car park, access roads, service yard, and external works (the shell works). The document is to be read in conjunction with the AFL.
- 1.2 This document describes the requirements for a steel framed store with an external surface car park, and separate service yard. For a typical store the structure will be a portal frame with a shallow pitched roof.
- 1.3 There are 3 model Neighbourhood stores, and the requirements vary slightly for each which is referred to where relevant in this document. Confirmation is required from the SSL project manager of the applicable model store to be provided.
- 6k Model Neighbourhood store – approximately 6,000ft² sales area
 - 10k Model Neighbourhood store – approximately 10,000ft² sales area
 - 15k Model Neighbourhood store – approximately 15,000ft² sales area
- 1.4 APPENDIX A includes a Project Requirements document which is used to update the requirements for each project, list the agreed project drawings and identify the Sainsbury's Standards that are relevant to further define the building shell requirements.
- 1.5 The requirements described in this document reflects a store designed for function and purpose, not to assumed Institutional Standards
- 1.6 The SSL Standards referred to throughout this document are stored on Sainsbury's Specs & Standards Website. Access to this Website is restricted to authorised users only and the developer is to seek confirmation of the requirements from the Sainsbury's Project Manager.
- 1.7 All activities, whether by an organisation or an individual, have some impact on the environment. Sainsbury's recognises its responsibility to minimise the impact its operations have on the environment and seeks to achieve this through a programme of continuous improvement. In practical terms this means reviewing the performance of: -
- Use of energy, particularly from non-renewable resources.
 - Minimisation of use of resources.
 - Avoidance of waste generation.
 - Management, re-use and recycling of waste.
 - Avoidance of environmentally damaging materials.
 - The development of alternatives to ozone depletants and the replacement of CFCs and HCFCs within Sainsbury's.
 - Encouragement of recycling through the use of recycled materials
 - Minimisation of the impact of Sainsbury's products on the environment through improvements in design, manufacture, distribution, use and disposal.
 - Promotion of an understanding of environment issues relevant to Sainsbury's among staff, suppliers and customers.
- Confidentiality**
- 1.8 The developer shall not take or authorise the taking of any photographs of the works for use in any publicity or advertising nor publish alone or in conjunction with any other person any articles, photographs or other illustrations relating to the works without the prior written consent of SSL, except those documents published in the public domain by way of obtaining Planning Permission.

2.0 GENERAL REQUIREMENTS, APPROVALS AND CONSENTS

- 2.1 The developer is to apply for, obtain and comply with all relevant approvals required under the current Town and Country Planning Act, Highways Act, Environmental Protection Act and other relevant acts including comments/approvals made by the Environment Agency. This requirement is to apply to all the respective Statutory Authorities that prevail in England, Scotland, Wales or Northern Ireland as applicable. The developer's planning application shall include all tenant's plant and equipment located in the service yard, details of which are to be obtained from SSL. SSL will prepare and submit the advertisements application for the store building and external signage generally but will require all reasonable cooperation in this regard from the developer.
- 2.2 The store building shell and associated external works are to comply with all current statutory regulations, Codes of Practice, British Standards and other regulations arising from the construction and ultimate use of the building including Building Regulations, CDM Regulations, Equality Act and all other relevant acts including any local/regional byelaws including "Building Warrants" in Scotland. Notwithstanding that reference may be made within the body of this specification document to specific BS references, the most current versions of these standards are to be complied with if the stated versions have been superseded.
- 2.3 If it is necessary to obtain a derogation from any statutory requirement, the developer will not implement these without prior agreement from the SSL project manager.
- 2.4 The developer is to provide copies of all consents and approvals obtained.
- 2.5 The developer will ensure that the shell works are registered with the 'Considerate Constructors Scheme' and carry out the works under the Code of Considerate Practice
- 2.6 SSL will carry out a security audit of the site and surrounding area and recommend the security requirements which are to be included in the design and construction of the shell works.
- 2.7 The store design is to be approved by the SSL Store Development Group (SDG) at several stages of the developer's design process. The developer's team will collaborate with SSL's architect to prepare the design submission for each stage as outlined below: -
- SDG 1 Initial 'concept' design approval for Investment Board Approval (Typically RIBA stage 1/2)
 - SDG 2 Design approval prior to the submission of a Full (detailed) or Reserved Matters Planning application (Typically RIBA stage 2/3)
 - SDG 2R Design approval after the grant of Full or Reserved Matters Planning consent. Approval of any negotiated changes.
 - SDG 3 Retail layout sign off for the project fit out. Prepared during the developer's tender design stage (Typically RIBA stage 4)

SDG 1

1. The proposed site plan including land take, store position, site access/egress and traffic management/highways.
2. Site features, levels at key positions on the site, boundaries and any potential risks.
3. General internal traffic circulation.
4. Car Park layout and numbers.
5. General location, size and type of store.
6. Landscaping principles.
7. Notional column positions.
8. Sections through the site to illustrate store level relative to surrounding boundaries, adjacent properties, the adjacent highways and the access road.
9. Bus stops

SDG 2

1. The position, design, shape and space use of store, including (column positions) and external car park.
2. Store entrance detail and location.
3. ATM location if applicable
4. Service yard layout including plant location and vehicle tracking.
5. Elevations showing proposed external building design, cladding materials and colours.
6. Confirmation of locations of incoming services, foul and surface water sewer outfalls.
7. Main building and external signage locations.
8. Landscaping.
9. Car park operation and layout including, pick-up point, car spaces, bicycle racks, trolley bays and requirement for pedestrian/bicycle routes.
10. Details and location of mechanical, electrical and refrigeration (M, E & R) plant.
11. Initial retail layout (provided by SSL) based on a current CIP.
12. For complex or mixed-use projects indicative sections / phasing / residential massing

SDG2R

Post planning review of SDG2 and approval of any changes made through the negotiation of a consent.

SDG 3

At this stage the drawings are re-assessed, and the design work is done by SSL to ensure that wherever possible any new initiatives have been taken on board and the layout reflects as near as is practicable SSL's latest requirements prior to Retail sign off. The SDG3 layout will enable the required drainage points and slab recesses to be identified by the SSL project team.

1. Detailed store plan.
 2. Detailed building shell including agreed column locations and sizes.
 3. Exact location of any vertical circulation.
 4. Detailed layouts for key areas such as bakery, counters, unloading bay, colleague areas, toilets, coldrooms, warehouse racking.
 5. Checkout numbers, service desks.
 6. Number of cabinets in store (produce, provisions, frozen).
 7. Gondola locations and aisle widths.
 8. Any compromises to the store such as bulkheads, ramps, stair core from property above.
 9. Drawing showing position of major items of service plant and service routes and risers.
- 2.8 The Developer is to give SSL 4 weeks' notice of the date by which receipt of specific information is required subject always to the prior agreement of an information release programme.
- 2.9 Advertisement consent for signage which is combined with the name of the building, or which includes signage for other tenants will be the developer's responsibility. Note that where joint signage totems are to be provided, SSL's signage must be located at the top of the totem.
- 2.10 The project is to comply with the requirements of SSL's Group Insurance Standards. The SSL Project Manager will notify the SSL insurers prior to the fit-out works commencing.

- 3.0 DESIGN PRINCIPLES AND GENERAL REQUIREMENTS**
- 3.1 General**
- 3.2 Design Life**
- 3.3 Materials and Workmanship.**
- 3.4 Consultants, Tenant's Representatives and Coordination Responsibilities.**
- 3.5 Access for SSL Fitting Out Works Contractor.**
- 3.6 Store Unit Shell – Design Brief.**
- 3.7 Acoustic Requirements.**
- 3.8 Sustainability and Environmental Requirements.**
- 3.9 Service Yard.**
- 3.10 Car Parking and External Works Generally.**
- 3.11 Signage.**

3.1 GENERAL

- 3.1.1 Sections 3 and 4 of this document should be read in conjunction with the Project Requirements document in Appendix A).
- 3.1.2 The shell works are to be designed in accordance with SSL's latest standard building and site layout plans for the relevant sized store.
- 3.1.3 Aims and objectives for the design of stores are as follows and the developer should consider these criteria for the development: -
- Create attractive, customer friendly site layouts.
 - Maximise visibility and branding opportunities with store entrance clearly visible on approach.
 - Highway access and egress to and from the site are to be safe and simple for the customer and for servicing.
 - Integrate the layout in the contextual urban fabric of the site and its surrounds.
 - Promote environmentally sustainable design.
 - Maximise future extension capability
 - Create best value for money.
 - Create the best operationally efficient design for the store. To be read in conjunction with this specification, SSL Standards and the SSL Feasibility Design Manual.
 - Consider buildability, speed of construction and off-site fabrication where appropriate.
- 3.1.4 The building shall be single storey with a level customer access from the car park through into the store entrance/exit.
- 3.1.5 The building shall be designed in such a manner that it fully caters for the installations required by the Tenant and the proper functioning of the building as a food retailing store. It shall be weather-tight, water-tight and air-tight in accordance with the air leakage requirements as set out in this document.
- 3.1.6 If it is a requirement of the planning consent to achieve a BREEAM rating, the developer is to undertake a shell and core assessment to comply with the consent.
- 3.1.7 Construction is to be carried out using materials and tolerances which conform to the latest British Standards and the workmanship shall comply with the latest British Standards and Codes of Practice. Where no BS exists for the materials specified, such materials shall be of high quality and consistent with the performance required. Where no Code of Practice exists for the operations to be carried out, the workmanship shall be consistent with the standards laid down by the respective trade institutions.
- 3.1.8 The developer is to commission a sun path tracking study for the site to identify the impact of solar glare and heat gain particularly on checkout areas, and present proposals to mitigate this to the SSL project manager for approval. Glare into the store can render the till scanners inoperable and, together with heat gain, can create uncomfortable environmental conditions for customers and staff.
- 3.1.9 The fire strategy for the shell works is to comply with SSL's Standard Fire Safety Design Guide and the developer shall liaise with SSL's project manager and fire engineering department during the SDG and store design process.
- 3.1.10 Any dimensional deviations shall be rectified at the developer's expense.
- 3.1.11 The ground floor slab shall not incorporate pre-stressed precast concrete or post-tensioned in situ concrete elements without prior agreement with SSL.

Maintenance

- 3.1.12 CDM 2015. The developer's principal designer must consider the construction phase works and the future maintenance of the building. The developer's principal designer must engage with the SSL design team to ensure that the design complies with SSL requirements at feasibility stage. The developer must highlight residual risks which will be incorporated into the Pre-Construction Information document for the SSL fit-out contractor. The H&S File from the developer's works must be provided to Sainsburys. Careful consideration shall be given to achieving low-cost maintenance stores. A risk assessment to show how safe maintenance is to be achieved for each element of the building is to be provided to SSL.
- 3.1.13 Access for maintenance activities - designers have a duty to consider the health and safety implications of their design. Using the hierarchy of control principles identified in the Work at Height Regulations it is a requirement to eliminate the need to work at height if this can be done. Early engagement on design and design review should enable risks to be eliminated and safe access to be provided for all building users. Ideally maintainable plant should be at ground level if this is achievable. The developer's Principal Designer (PD) and the SSL Principal Designer/property team must consult and work together to achieve this requirement. Placing plant internally requires a specific consideration regarding access, air flow and plant replacement strategies.
- 3.1.14 Roof safety - a maintenance access strategy must be agreed with SSL to maintain gutters, drainage points, signage positions and any plant and the PV solar panels located on the roof.
- 3.1.15 O&M manuals to be provided by the developer together with a planned and preventative maintenance schedule that minimises the regular maintenance inspections but allows repair of accidental damage to be done economically outside of any maintenance schedule. The developer is to liaise with Sainsbury's Principal Designer to provide the required information.

3.2 Design Life

- 3.2.1 The Design Life of the store is to be 25 years subject only to a reasonable maintenance regime to be undertaken by SSL. All materials specified should require minimum maintenance during the life of the product.
- 3.2.2 All external painting to steelwork, timber cladding and the like are to have a minimum 10-year period to first maintenance cycle.
- 3.2.3 The developer shall be responsible for the replacement of any defective planting within the landscaping to the site for 12 months (or longer if required by the planning consent).

Air Tightness and Sealing; Vibration

- 3.2.4 SSL standard criteria for air sealing to the store building is that the air leakage rate is to be a maximum of 2m³/hr/m² of envelope at a pressure of 50 Pascals. The design of the building shell shall ensure good sealing of joints between differing materials and components to the external walls and roof, including internal linings, together with openings of whatever nature in the external walls and roofs.
- 3.2.5 The developer is to undertake testing of the store building on completion of the shell works to demonstrate the air leakage rate is achieved and certified in accordance with CIBSE technical memorandum (TM23:2022). Should the BSRIA test fail to meet the stated requirements, the developer will be required to fund an inspection, second test and report to be prepared by BSRIA. A copy of the test certificate is to be given to SSL as soon as it is available.
- 3.2.6 The design and construction of the store building shall ensure that adequate isolation exists to remove all vibration from whatever cause, which exceeds the classification of "imperceptible" set out in the latest edition of the CIBSE GVA/15 Guide A: Environmental Design 2015 (table A1.14).

3.3 Materials and Workmanship

- 3.3.1 Most fitted out areas of the store will not be provided with ceilings. Materials specified for the shell works should not therefore be capable of shedding particles during the fit-out, use and maintenance of the store, nor attract vermin, birds or other pests. Any external soffits/canopies/ledges etc. are to be adequately bird proofed.
- 3.3.2 The developer shall use reasonable skill and care to ensure that the shell work does not include any products, materials or substances which are identified as being deleterious or unsatisfactory in accordance with the provisions of the latest edition of the guide entitled "Good Practice in the Selection of Construction Materials" prepared by the British Council for Offices or which are identified as such in the specification; or are generally known at the time of specification to be deleterious to health and safety or the integrity of buildings and/or other structures and/or plant or machinery; or not in accordance with British Standards or Codes of Practice.
- 3.3.3 If it is suspected that the materials used and/or the workmanship are not in accordance with the specification and associated documents, SSL may require the developer to open up for inspection any work covered up or to arrange for or carry out any test of any materials or goods (whether or not already incorporated in the Works) or of any executed work. The cost of such opening up or testing (including the cost of making good) shall be paid for by SSL unless the inspection or test shows that the materials, goods or work are not in accordance with the AFL and Specification.
- 3.3.4 If any work, materials or goods are not in accordance with the AFL and specification SSL may issue instructions to the developer regarding the removal from the site of all or any of such work, materials or goods and correct the issue and make good to the work.
- 3.3.5 Particular care shall be taken when specifying materials for schemes that are located on sites that are vulnerable to extremes of weather e.g. exposed to high winds or in coastal locations, or sites that are adjacent to certain types of use that could cause degradation to the building fabric.
- 3.3.6 The conditions of exposure, humidity and the like shall be considered prior to specifying materials for the building shell to ensure all materials used in the shell works are resistant to vermin infestation, fungal attack, bird attack and other forms of biological breakdown.
- 3.3.7 Insulating materials shall be HCFC/Polystyrene-free with zero Ozone Depleting Potential (ODP). Polyurethane not to be used, use non-combustible.
- 3.3.8 All timber products used in the shell works shall be sourced from FSC-accredited suppliers or alternatively from suppliers outside of the UK who are able to provide documentary evidence confirming sourcing from lumbar plantations complying with local regulations governing responsible and sustainable forestry management and in accordance with any bi-lateral agreements.
- 3.3.9 Proprietary components and materials incorporated into the shell works shall be used strictly in accordance with manufacturer's instructions and for the purpose and circumstance for which they were designed to be used.
- 3.3.10 The developer shall procure warranties from all parties who are appointed to the shell works with design responsibility which is likely to include but not limited to the following work packages where applicable to the project:
- The professional team
 - Design and build main contractor
 - Ground remediation contractor
 - Piling/ground improvement works.
 - Structural frame

- Ground Floor Slab
- Roofing
- External wall cladding
- Glazed curtain walling
- Suspended floor
- Scissor lift

3.3.11 As part of the shell works the Developer will be required to supply and install various items of plant and equipment including:

- Scissor lift
- Main entrance bi-parting doors (external and internal)
- External lighting (including car park and service yard)
- External protection/street furniture
- Electricity substation (unless direct LV provision)
- Manually operated service yard gates
- Rainwater harvesting tank, control unit and expansion/ pressure vessel.
- Trolley wheel locking retention system (Gatekeeper Purcheck system formerly Carttronics)

The above plant and equipment must be to SSL Standards and be supplied by SSL's specified manufacturer and where incorporated will be tested and commissioned prior to shell works Practical Completion. Where the permanent power supply to the development is not available when fit-out works commence, the developer will arrange for the testing and commissioning to be completed using the site temporary power supply. SSL will require reasonable advance notice of the intended date of the testing and commissioning to witness these. Following completion of the mains power supply connection to the site and the permanent connection of the equipment and services installations to the SSL LV switch panel, the developer will be required to attend a further running test of the respective items of equipment.

3.3.12 The shell works shall comply with BS 5606 Accuracy in building.

3.4 Consultants, Tenant's Representatives and Coordination Responsibilities

- 3.4.1 SSL and the developer shall each appoint a project manager to act as the main point of contact for all matters associated with the execution of the design and construction of the Developer's shell works and the SSL fitting-out works.
- 3.4.2 Following agreement to the overall design of the shell works any variations to the developer's design may only be implemented following receipt of a written confirmation from SSL's project manager.
- 3.4.3 The developer's shell works design team shall attend coordination meetings with SSL's fitting-out works design team at regular intervals, as reasonably required by SSL's project manager. The teams shall also meet as and when required to coordinate and witness testing and commissioning of plant, equipment and services. The SSL Project Manager shall chair these meetings and distribute minutes.
- 3.4.4 The SSL design team will give assistance to the developer's design team in the interpretation of these requirements.
- 3.4.5 At each RIBA work stage the developer shall provide preliminary and construction status shell works drawings with a 3D Revit model in sufficient time to allow the SSL at least 10 working days for comment. A construction management plan including phasing plans will be provided for comment prior to the commencement of works.
- 3.4.6 The developer shall provide complete NBS specifications of all materials and workmanship to meet the base requirements and show compliance with the intent of the shell specification.

3.4.7 At the commencement of the shell design, the developer shall issue to SSL the following which are to be kept updated and re-issued as the project progresses: -

- List of shell work design drawings and dates that they are to be issued for comment.
- List of information required from SSL and dates that they are required.

3.4.8 The developer shall issue to SSL the following programmes of work and method statements for initial comment: -

- A design and development lead-in programme which highlights the dates by which all key activities and necessary approvals will be achieved in the lead-in to the commencement of the shell and fit-out works start date
- A Construction Method Statement for the whole of the shell works and where requested by SSL, detailed method statements for specific parts of the works.
- A construction programme for the shell works showing the dates and periods for each element of the shell works and highlighting the following: -

Start on site
Water-tight date
Air-test date
Secure service yard completion
Date(s) for testing and commissioning of equipment and services installations
Incoming services live dates
Statutory consent dates
Building Control/Fire Officer approval date(s) and reference numbers
Highways inspection date
Early access date for the installation of SSL's fitting-out contractors
Pre-handover inspections
Handover
Plant and equipment availability
End of defects liability period

3.4.9 Prior to commencement of the shell works contract and during the works on site, the Developer shall allow access to the site to SSL and their representatives by prior arrangement.

3.5 Access for SSL Fitting-Out Works Contractor

3.5.1 The procedure for possession of the area for the fit-out works shall be as follows:

- a. At intervals of 6 weeks and 2 weeks prior to the date for Sainsbury's possession of the shell works, representatives of the Developer and SSL shall carry out a site inspection to agree what actions are required to be carried out to ensure that the agreed "access date" is maintained
- b. On the "access date" representatives of the developer and SSL shall carry out an inspection and agree a list of snagging work. SSL's project manager will issue the list to the developer with dates by which the snagging items have to be rectified.
- c. Arrangements for access to the fit-out area by the shell works contractor to rectify the snagging items shall be agreed with SSL's fit-out contractor.
- d. The site fire strategy procedures during fit-out works are to be agreed between the developer and SSL before Access.

3.5.2 The developer shall provide information at handover as required in Appendix 4 of the Managing health and safety in construction - CDM Regulations 2015 document. <https://www.hse.gov.uk/pubns/priced/l153.pdf> . All information is to be made available electronically.

3.6 Store Shell – Design Brief

- 3.6.1 The building shell is to incorporate a main entrance lobby. For 6k stores this will be within the rectangular footprint of the building i.e., “internal”. For 10k and 15k the entrance lobby will project from the rectangular building footprint i.e. “external”. The lobby will be located as shown on the approved SDG drawings.
- 3.6.2 Both external and internal lobbies will be glazed full height with external glazing formed using curtain walling incorporating toughened glass built off a pre-cast concrete combined ground beam/stall riser with impact protection rail to the perimeter.
- 3.6.3 The lobby will include external and internal glazed electronically operated bi-parting doors sets, complete with all control gear and other associated ironmongery to SSL standards. Electrically operated security shutters are to be provided to the inner entrance/exit opening to the store complete with door controls and all supporting steelwork/door guides.
- 3.6.4 A large canopy will be provided to the front elevation of the building to cover the entrance lobby area and provide cover for trolley storage, bicycle parking and ATM (where required). This will be formed with the same roof covering as the main building, a white soffit liner, dark grey fascia (RAL 7016) and complete with all rainwater goods.
- 3.6.5 Other external doors to the front and/or side elevations shall be steel faced, timber solid core, external quality MOE doors. Doors to the rear elevation shall be to the same specification but will be unglazed.
- 3.6.6 A canopy will be provided over the goods-in doors within the service yard as shown on the SDG approved drawings. Goods vehicles will use the scissor lift or vehicle integral loading tailgates to drop goods to the service yard level. On 15k Neighbourhood stores the canopy becomes part of the building and forms an enclosed delivery dock area complete with a cladding upstand facing the yard above the loading dock to take double deck delivery vehicles, where dock shelters and shutters are to be provided to the delivery opening.
- 3.6.7 A 2.6m high glazed double door will be provided within the shopfront to facilitate removal and replacement of refrigerated cabinets directly to the sales floor.
- 3.6.8 The roofing system proposed is to be approved by SSL.
- 3.6.9 Prior to handover of the shell building the developer shall arrange for a reputable, independent roof consultant to inspect, test and report on the quality of the roof installation and recommend any remedial works required to achieve a satisfactory quality of works and that there is no damage to the system that will reduce durability/longevity. The type of roof test will be agreed with the SSL project manager. (e.g. electronic or flood test).
- 3.6.10 SSL stores are designed such that suspended ceilings are not provided within the fit-out, with the exception of the colleague area. The developer shall provide the following finishes to the internal faces of the shell which will remain exposed after the fit-out: -
- Soffit of the roof decking to be prefinished white, with white plastic caps to all fixings penetrating the roof decking soffit.
 - Exposed structural steel frame to receive a white paint finish
 - Exposed internal face of external wall cladding to be pre-finished white with white plastic caps to fixings penetrating the internal face of the cladding.
 - The internal surfaces of enclosed risers, service ducts, lift shafts and the like shall be treated to prevent the occurrence of dust.
 - Careful management of the quality of the finished works and protection where necessary.

3.6.11 The tenant plant and equipment is typically located as follows though will vary depending on whether cabinets within the sales floor so or do not have doors: -

<u>6k store</u>	<u>10k store</u>	<u>15k store</u>
External plant	External plant	External plant
1. Refrigeration pack 2. Gas coolers 3. VRF units and condensers 4. Substation (unless LV supply to store) 5. LV mains panel in GRP enclosure for EVCPs 6. PV Solar Panels	1. Refrigeration-Integrated Heating & Cooling (RIHC) plantroom and refrigeration including packs and coolers 2. False load evaporators or Air Source Heat Pumps 3. Gas coolers 4. AHU 5. Substation (unless LV supply to store) 6. LV mains panel in GRP enclosure for EVCPs 7. PV Solar Panels 8. Above ground rainwater harvesting tank	1. Refrigeration-Integrated Heating & Cooling (RIHC) plantroom and refrigeration including packs and coolers 2. False load evaporators or Air Source Heat Pumps 3. Gas coolers 4. AHU 5. Substation (unless LV supply to store) 6. LV mains panel in GRP enclosure for EVCPs 7. PV Solar Panels 8. Above ground rainwater harvesting tank
Internal Plant	Internal Plant	Internal Plant
1. CAT 5 booster set 2. H+V control panel 3. MVHR units for sales and domestic areas (supported from roof soffit) 4. Extract fans for bakery / hot food counters (supported from roof soffit) 5. PV Solar Panel inverter 6. Micro above ground rainwater harvesting tank	1. CAT 5 booster set 2. H+V control panel 3. LV Switchgear 4. Extract fans for bakery / hot food counters (supported from roof soffit) 5. PV Solar Panel inverter	1. CAT 5 booster set 2. H+V control panel 3. LV Switchgear 4. Extract fans for bakery / hot food counters (supported from roof soffit) 5. PV Solar Panel inverter

3.6.12 The developer will provide external and internal concrete plinths on which the plant will be located along with ventilation louvers and vents for intake/ exhaust for internal plant. The final location and sizes will be coordinated between the developer and the SSL team to ensure the meet the requirement of the fit-out design.

3.6.13 Roof members to support the tenant installed solar panels will be provided along with an external main access stair and secondary roof area escape ladder complete with slip-resistant, reinforced walkways, handrails and the like to Sainsbury's Standards.

- 3.6.14 The developer to include for both the acoustic and visual screening of plant areas and the service yard to satisfy the relevant planning requirements. The developer shall obtain the details relating to the dBa rating of plant and equipment from SSL.
- 3.6.15 Pedestrian routes should be carefully planned to provide safe access from all areas of the car park to the store entrance and from roads and footpath immediately adjacent to the site.
- 2.6.16 The minimum pavement width between the external face of the lobby front elevation and the car park/circulation road will be agreed with SSL but indicatively will be 6.5m (6k store with internal lobby); and approx. 2.6m for 10k & 15k stores.
- 3.6.17 The developer is responsible for forming and weathering, air sealing and pest proofing all openings for pipes, cables, ducts, fans, vents and the like through the roof, floors and the external walls of the shell works. The developer is to adhere to Sainsbury's Pest Proofing Specification which is available on SSL's Standards website.
- 3.6.18 The developer is to form an opening through the external walls for the ATM Bastion machine.
- 3.6.19 The developer is to supply and install a scissor lift in accordance with SSL Standards. For 15k stores SSL use double deck trailers which will include a double decker dock shelter with electronic roller shutter blind to the delivery bay.

3.7 Acoustic Requirements

- 3.7.1 Take such measures that are necessary in the planning, design and construction stages of the development to ensure that when SSL have fitted out their demise, the following will have been considered and appropriate action taken:
 - a. Noise and vibration generated from the use, operation and servicing of the store will not adversely affect the amenity of the occupants in adjoining and nearby properties including those proposed as part of the development.
 - b. Noise and vibration generated from other parts of the development outside SSL's retail store area demise shall not adversely affect the amenity of the occupants in adjoining and nearby properties and customers and staff within the SSL retail store.
 - c. The development complies with all statutory and local authority requirements.
- 3.7.2 SSL will provide the following information at the planning and early design stages of the development.
 - a. Acoustic data for the SSL's fit out plant and equipment.
 - b. Store opening hours and delivery periods.
 - c. Details of the proposed use of each area within the store.
- 3.7.3 The Developer shall employ an acoustic consultant at the planning and early design stages of the development who is experienced in the acoustic assessment of supermarket noise and who will undertake at least the following:
 - a. An environmental noise survey and report appropriate to the project.
 - b. A planning report to assess noise and vibration associated with the use, operation and servicing of the store in relation to the occupants in adjoining and nearby properties. The report shall identify noise mitigation measures to be considered necessary to comply with the above requirements.
 - c. A report to assess noise and vibration from other parts of the development outside SSL's retail store area demise to the occupants in adjoining and nearby properties, customers using the store and staff working in the store. The report shall identify noise mitigation measures to be considered necessary to comply with the above requirements.
 - d. Provide an electronic copy of all reports and recommendations to SSL and attend meetings with SSL's acoustic consultant where requested. The report must clearly define the appropriate sound insulation for separating walls, floors and roofs both for impact and

airborne noise, any appropriate anti-vibration measures for plant and equipment and appropriate attenuation for plant.

3.7.4 SSL will employ their own acoustic consultant who will comment on the developer's acoustic consultant's reports and recommendations.

3.7.5 The developer is to ensure that the building, including SSL's services equipment, complies both with UK and any local statutory regulation relating to noise.

3.8 Sustainability and Environmental Requirements

3.8.1 In the shell works the Developer is to: -

- Minimise waste throughout the construction phase using economical design and construction processes combined with good site management practices targeting elimination and reduction of waste, and recycling the maximum amount of waste possible.
- Include sustainable surface water drainage systems wherever viable.
- Include a rainwater harvesting system using roof rainwater drainage for staff WCs.
- Maximise natural lighting within the store building with extended areas of external wall glazing.
- LED external lighting with specific equipment in line with SSL design and SSL Standards.

The developer must liaise with SSL regarding the implementation of the above procedures and technologies before reference is included to any of them within the planning application for the development.

3.8.2 The developer shall establish whether SSL wish to enhance the insulation to the building envelope in excess of building regulations requirements prior to completing the tender design.

3.8.3 The developer shall take account of Modern Methods of Construction potential when designing the building shell, including modular/off site construction opportunities. All such proposals are to be submitted by the Developer to SSL for approval.

3.9 Service Yard

3.9.1 SSL require exclusive use of a level, self-contained and unimpeded vehicle standing and manoeuvring area service yard, the finished level of which is to be constructed level with the sales area finished floor level. Access to the yard from the public highway is to be via the car park or access road. This area must be complete, secured and available on the agreed access date for the commencement of fit-out and be suitable for intensive use by large and heavy vehicular traffic.

3.9.2 The developer's design and supply responsibilities are as follows:

- a. The service yard including appropriate paving and surface water drainage, entrance gates and enclosure.
- b. Service yard bollards and Armco impact barriers to the internal yard perimeter, plant areas and unloading canopy support columns.
- c. External lighting and lighting to the underside of the canopy
- d. Minimum 3m high non-climb security fencing to entire perimeter, incorporating acoustic attenuation where required by Planning Conditions.
- e. Sainsbury's security audit recommendations.
- f. Driver's gate and fire exit gate.
- g. Scissor lift
- h. Delineated fire exit route through the service yard where required.
- i. All builder's work including enclosure required for the substation and transformer (if applicable)

3.10 Car Parking and External Works Generally

3.10.1 The external car park must comply with SSL's latest car park and external works design and specification requirements. All surfaces are to be suitable for trolley use and should provide a rattle free surface finish. Where required for a SUDS paved parking bays may be used with SSL prior agreement.

3.10.2 The developer's design and supply responsibilities are as follows:

- a. All external parking areas, paths, pedestrian crossings, public highway works, access road and service access with enhanced structural loading requirements including all parking lining/designations, road markings and traffic calming.
- b. Boundary fences and railings.
- c. Trolley bay hoops/railings.
- d. Trolley wheel locking retention system (Gatekeeper Purchek system formerly Cartrronics)
- e. Bollards.
- f. Shopfront and building trolley protection rails.
- g. Foundations for totem signs typically a main and pedestrian access totem (number to be confirmed by SSL) including a service duct and draw cords from each totem back to the store location agreed with SSL's project manager.
- h. Litter bins.
- i. Tree grilles.
- j. Grit bins.
- k. All external lighting in the car park, service yard, pedestrian paths, car park access roads and store building external emergency lighting.
- l. Bicycle parking facilities for colleagues and customers.
- m. Hard and soft landscaping.
- n. All incoming services, water, HV or LV electrical supplies and substation (where required) and all associated BWIC with services including underground ducts, and bases.
- o. Builder's work including below ground ducts and concrete plinths/ foundations required for SSL plant. CCTV, barriers, customer electric vehicle and GOL vehicle charging points (EVCPs).
- p. All bases, below-ground ducts, access chambers and the like for SSL including ANPR, CCTV and totem sign installations.

3.11 Signage

3.11.1 All signage is provided as part of the fit-out contract. Signage to the car park and external areas will be supplied free-issue to the developer to install.

3.11.2 The developer will provide signage zones, support framework, flashings and wire ways for corporate building signs to all strategic elevations, usually 1 No per elevation.

3.11.3 Signage weights and sizes will be provided on a project specific basis. The Developer is required to ascertain signage weights and sizes prior to carrying out structural design.

- 4.0 GENERAL CONSTRUCTION SPECIFICATION**
- 4.1 Substructures**
- 4.2 Superstructure**
- 4.3 Concrete floors – ground bearing and suspended**
- 4.4 Roofing**
- 4.5 Lightning Protection System**
- 4.6 External Walls**
- 4.7 Glazing and Windows**
- 4.8 Entrance Lobby & External Doors**
- 4.9 Internal Walls**
- 4.10 Finishes and Decoration**
- 4.11 Policy, Fire Safety, Fire Standards & Protection**
- 4.12 Access Road**
- 4.13 Service Yard**
- 4.14 Car Park and External Areas**
- 4.15 Below Ground Drainage**
- 4.16 Landscaping**
- 4.17 Off-site Roadworks**
- 4.18 Incoming Services**

4.1 Substructures

- 4.1.1 The developer will complete a geotechnical site investigation and report in accordance with BS 5930 and a copy of the report will be shared with SSL for review and comment. The survey of the existing site is to identify the presence of below ground obstructions including foundations, structures, statutory and private services, water courses, tanks, drains, culverts and the like. Where any of these have been or are to be abandoned, they are to be demolished/broken up/grubbed up and backfilled with suitable material and compacted to avoid future settlement. Where any of these items are to be retained, they are to be diverted to the boundaries of the site or other suitable positions which will not cause any disruption to the operation of the store if future access is required. SSL approval will be required to all such diversions.
- 4.1.2 All aspects of the development will be designed to suit the site conditions identified within the site investigation report and shall be in accordance with BS 8004, relevant Codes of Practice, local Byelaws and to the approval of Building Control.
- 4.1.3 The developer shall identify and manage potential land contamination on the site in accordance with the Environment Agency's Land Contamination Risk Management (LCRM) Stages 1, 2 and 3: -
- Stage 1: Risk assessment – preliminary risk assessment; generic and detailed qualitative risk assessments; site investigation
 - Stage 2: Options appraisal – identify feasible options; evaluate options; select remediation option.
 - Stage 3: Remediation and verification – develop remediation strategy to mitigate the risks of contaminated land exposure to human health; remediate; produce verification report; do long-term monitoring and maintenance if required.
- The LCRM must be completed by Competent Persons as defined by the National Planning Policy Framework. Copies of all documents produced must be shared with SSL for review and comment.
- 4.1.4 All wayleaves/third party easements and the like which are on or cross the site are to be surveyed and shown on a drawing, a copy of which is to be provided to SSL.
- 4.1.5 Foundations shall be designed in response to the specific local ground conditions defined in the site investigation report. The substructure and foundations shall be designed to limit total foundation settlement to 25mm and for differential settlement the angle of distortion should not exceed 1 in 500.
- 4.1.6 The substructure design shall take full account of any risk from building settlement or movement and shall be in accordance with the tolerance stated within this document so that the store operation, building appearance and structural stability will not be impaired. Where below-ground services pass through the building foundations the design shall ensure damage caused by building movement is prevented.

4.2 Superstructure

- 4.2.1 The structural frame can be steel, timber or concrete, subject to SSL approval, and is to be designed to support services (including MVHR equipment), perimeter display shelving, and all necessary support framework, wind loads, dead loads and imposed loads details in the current British Standards and to current Building Regulations. The detailed design shall include all necessary bracing and framing to ensure frame stability and should also consider the effects from accidental damage and disproportionate collapse.
- 4.2.2 All structural wind bracing, shear walls and/or ties are to be carefully designed to be concealed within the fabric of the structure and located in positions agreed with Sainsbury's. The locations

are to be carefully considered to ensure that there is no bracing or ties in areas of glazed elevations nor across windows or door openings.

- 4.2.3 Secondary steel framing around loading bay doors, external doors and internal doors are to be included in the developer's design.
- 4.2.4 Steel supports and framing for SSL's external building mounted signage are to be provided at positions and to details approved by SSL prior to installation. The weights and fixing points of all external building signage shall be confirmed by SSL's design team.
- 4.2.5 Floors and plant areas to be designed for the following minimum loadings:

Store at grade	Superimposed	Finishes	Notes
Sales Area & Prep Areas	5.0 kN/m ²	2.0 kN/m ²	Infill floors excluded e.g., cold store floors/insulation
Warehouse area, Unloading bay	10 kN/m ²	N/A	
Staff Areas & Offices	2.5 + 1.0 kN/m ²	1.0 kN/m ²	Cash Office and Cash Machine Room to have concrete cover slab or equal approved method. Cash Office to have 1 safe. Total load – 30 kN
Plant Rooms	7.5 kN/m ²	N/A	Note: Slab will carry vibrating plant and shall resist 5Hz. An area to be agreed with SSL shall be bundled in the plant room for boiler/pump plant

- 4.2.6 The imposed structural load shall be determined based on the most onerous combination of dead, imposing wind loading as set out in the current BS EN 1991 (Eurocodes).
- 4.2.7 In addition to all self-weight, superimposed and snow loads, the following shall be designed to:
- i. Service Load to purlins – 0.30kN/m²
 - ii. Service Load to frame – 0.15kN/m²
 - iii. PV solar panels – 0.25kN/m² frame; 0.40kN/m² purlins
- 4.2.8 Differential movement between the structural frames to the SSL unit and any other adjacent retail units must be able to be accommodated in the architectural finishes/cladding/flashings.

Internal clear height requirements to underside of lowest structure are as follows: -

Clear Heights (to lowest structure)			
Area	6k store	10k store	15k store
Sales and warehouse areas	4.00m	4.00m	4.50m
Warehouse areas	4.00m	4.00m	4.00m
Loading bay Canopy	4.50m (min)*	4.50m (min)*	N/A
Service yards (if covered to allow for services)	5.30m	5.30m	5.30m

* The height of the canopy on the 6k and 10k stores is dictated by the roof slope. The delivery vehicle does not go beneath the canopy and the determining design factor is the clear working height required for the scissor lift whilst unloading. The 15K store does not have an unloading bay canopy – internal unloading.

- 4.2.9 A trussed frame solution shall only be used where services can easily pass through the trusses and subject to agreement by SSL.

4.2.10 The canopy covering the shop front and main entrance shall have a minimum clearance of 3.9m from finished floor to the underside of the finished soffit level.

4.2.11 The SSL model store design is based upon a 'beam and stick' frame format with column on a grid as follows:

- Internal building grid – approx. 9m x 12.5 (6K) and 9m x 14.25m (10K & 15K) stores to be agreed with SSL for SDG 2 approval.

The developer shall liaise with SSL's project manager and agree the column layout as this is particularly sensitive to the requirements of the retail plan.

4.2.12 Steel used in the structural frame shall be a minimum of grade S355 steel.

4.2.13 If a timber frame is proposed by the developer and approved by SSL, the members of the frame shall be structural glue laminated timber, using Grade GL24 and the moisture content of the individual pieces shall not exceed 20% at the time of erection. To control moisture content during construction, the frame members shall be treated with a single coat of water repellent prior to delivery to site. Such treatment is to be compatible with the final decorative treatment that may be applied following erection of the frame. Timber design is to be service class 2 for covered and generally heated environments with a likely final moisture content in service conditions of approximately 15%.

4.2.14 The building structural frame design must include all necessary rails, head restraints and the like secondary steelwork to support wall cladding, curtain walling, brickwork, blockwork and the like to the external and internal walls including the main dividing back of house wall between the sales area and the warehouse/offices/colleague areas.

4.2.15 Purlins are to be designed for full dead and live loads including support for services.

4.2.16 The frame, external walls, compartment walls and supporting columns are to be fire protected to comply with current Building Regulations.

4.3 Concrete floors – ground bearing and suspended.

4.3.1 Ground floor slabs are to be constructed from in-situ concrete and shall be waterproofed using an external membrane and insulated to achieve U-values to comply with the requirements of Building Regulations. Ground floor slabs shall be in accordance with the latest edition of "TR34 Concrete industrial ground floors – a guide to design and construction".

4.3.2 Suspended floor slabs should either be an insitu reinforced concrete suspended slab or composite floor construction, complete with structural screeds as necessary and will extend through the sales area, warehouse, office areas and colleague areas.

4.3.3 All ground bearing or suspended floor slabs are to be laid to tolerances as below. Sudden irregularities are not permitted. When measured with a slip gauge to BS 8204 or equivalent, the variation in gap under a straight edge laid in contact with the surface is to be not more than the following:

- Areas which are to be self-finished and floors to receive vinyl sheet or tile finish directly bedded on adhesive 5mm under a 2m straight edge. Class SR2.
- Areas to receive terrazzo tiles or screed 10mm under a 2m straight edge. Class SR3.
- Bulkstock including circulation areas 5mm under a 2m straight edge. Class SR2.

The departure of slab or floor level from datum should not generally be greater than $\pm 15\text{mm}$ for slabs to receive finishes not less than 60mm thick. Where finishes are less than 60mm thick then this deviation shall be $\pm 8\text{mm}$

The slab thickness tolerance shall be -0mm and +10mm from the designed requirement.

- 4.3.4 The floor slab to the sales area and lobby should be set 70mm below the finished floor level and finished with a light tamp finish to receive terrazzo tiles provided during the SSL fit-out works to form a consistent finished floor level throughout the store.
- 4.3.5 The floor slab in the warehouse and domestic areas should be set at finished floor level and have a power floated finish. Immediately after finishing the concrete is to be treated with Sika Fibreshield for hardening purposes and Sika Proseal 90 for sealing (or similar approved).
- 4.3.6 The slab should be recessed 200mm below the finished floor level in the location of freezer to allow the installation of thermal insulation during the fit-out works. The position of this recess will be confirmed by SSL.
- 4.3.7 A slot in the floor slab is required for cabling to central islands in the sales area in a location to be confirmed with SSL.
- 4.3.8 The developer's design is to incorporate the adequate structural joints to safeguard the integrity of the floor slabs in respect of the prevailing ground conditions and foundation design and provide the necessary isolation of the floor slab from the rest of the building structure. Joint design shall take account of the high frequency of wheeled traffic i.e. loaded cages, pallets and trolleys and shall have both a high degree of durability and allow for the requirement for these items to be able to travel smoothly across them.
- 4.3.9 The locations of structural breaks, expansion and movement joints is to be determined at an early design stage and agreed with SSL.
- 4.3.10 The demarcation line between the sales area slab and the back of the house slab area shall be agreed with the SSL project manager in the design stage.

4.4 Roofing

- 4.4.1 The preferred roof construction is Topdek insulated roof cladding panels (min 120mm insulation and 158mm overall thickness) or similar approved with white polyester finish to the internal soffit. The panels are to be mechanically fixed to the purlins with any fixings penetrating the soffit of the decking panels covered with caps to match the colour of the internal soffit. All joints between the panels are to be in accordance with the manufacturer's requirements.
- 4.4.2 The roof decking is to be designed for full live loads and the dead weight of the roof construction itself together with all positive and negative wind loads.
- 4.4.3 The materials and construction of all roofs are to provide a thermal transmission co-efficient (U-value) in accordance with current Building Regulations. Insulation for pitched roofs must be part of the roof slope construction.
- 4.4.4 SSL will require access on to the roof and front canopy to carry out maintenance to the rainwater outlets and gutters, PV solar panels, signage and other equipment. Typically, this will consist of guardrails set 4.5m back from roof edge complete with mansafe system to access areas outside of guardrails with slip resistant reinforced walkways to give access to the canopy roof and illuminated signage zone. Details are to be provided to comply with statutory health and safety regulations and to be agreed by the SSL project manager.
- 4.4.5 A 25-year guarantee is to be provided for the roof product and a warranty for the installation of the roof.
- 4.4.6 The roof coverings are to be complete with all necessary upstands, weatherings, collars, flashings, gutters and air sealing works associated with kerbs, access staircases and vents.
- 4.4.7 Form all openings, holes and the like through roof coverings and composite decking for fit-out ductwork, pipes, cable trays, and other services equipment complete with kerbs, upstands, weathering, flashings, air sealing works, and any secondary support steels required to properly

trim out such openings and make them water and air tight. All such works by the developer to be coordinated with the SSL fit-out and services installations.

4.4.8 Provide a Stormsaver rainwater harvesting installation complete with an above ground tank, filtration, pumps, automatic backwashing filtration and controls all housed in one unit system. Install an automatic WRAS compliant mains water top up to provide a continuous water supply, overflow drainage connection. The tank size, pressure output, UV disinfection and controls and location are to be confirmed with SSL for each project.

4.4.9 The tank will be located internally on 6k stores (micro pump) and externally for 10k and 15k stores.

4.5 Lightning Protection System

4.5.1 Incorporate a lightning protection system to provide protection to the building, roof-mounted signage and roof mounted plant and equipment. The system shall comprise:

Air Termination Network including:

- Roofs constructed of metal decking shall be regarded as an air termination network thereby separate external conductors are not required.
- Solar panels where installed.
- All metalwork including plant and equipment protruding above the air termination networks must be bonded to it. These bonding connections must be of the same integrity as that used throughout the system.
- Conductors must be designed in such a manner that they do not negate or impinge on the design aesthetics of the building structure profile.

Down Conductors (tapes and structural steelwork) including:

- Utilise the structural steelwork frame or concrete re-enforcement columns of the building as the down conductors for the lightning protection wherever possible. Where it is not possible down tapes must be considered. The method and locations of connecting the air termination network and ground termination network must be specified.
- Down tapes must consist of the materials to match/complement the air termination network and PVC coverings may be used on down conductors for aesthetic reasons when required.

Earthing Termination network including:

- Earth termination may consist of either earth electrodes within weatherproof inspection pits or by utilising the earth provided by the reinforcing bars within the pile caps.
- If earth rods are utilised, then the length of the rods will depend upon the soil resistivity.
- Stainless steel earth rods must be specified for the building on landfill sites or where soil has corrosive substances present.
- A test position must be allowed for at each inspection pit minimum number is 2 to allow for periodic testing of the system with the electrodes disconnected.
- The lightning protection must be directly bonded to the relevant building main earth bar.

4.5.2 The developer shall ensure that the installer is an accredited member of the National Federation of Master Steeplejacks and Lightning Protection Engineers.

4.5.3 On completion of the system testing and commissioning, the developer shall obtain a Conformity Certificate.

4.5.4 Early Streamer Emissions (NF12-102) are not acceptable for use.

4.6 External Walls

- 4.6.1 All external walls are to be constructed from suitable, insulated, proprietary cladding panel systems or SIPs depending upon the store design.
- 4.6.2 SSL's preference for cladding to external walls is 240mm Eurobond Rockspan horizontal cladding panels colour RAL 7000 (or similar approved) with shopfront glazing to the main elevation and entrance lobby and perimeter high-level double-glazed windows. The proposed elevation design must be approved at SDG2 by SSL. At low-level, below the cladding and glazing there shall be a minimum 300mm high fair-faced concrete or facing brickwork plinth, actual height dependent on variation of external ground levels.
- 4.6.3 Composite cladding panels to external walls to all elevations may be provided subject to agreement with SSL, dependent on store location.
- 4.6.4 All proposed cladding panel systems shall be LPC approved and CFC/HCFC free & zero ODP with limited combustibility.
- 4.6.5 Typically, the model cladded building envelope does not require a blockwork inner leaf. However, in certain locations, such as ATM/Cash Offices, a masonry wall 215mm thick block (laid flat), reinforced with stainless steel bed joint reinforcements at 225mm vertical centres and steel rods fixed through the blocks is to be provided for security and insurance purposes.
- 4.6.6 Render (subject to SSL approval) and all masonry finishes on external walls in vulnerable areas must be treated with anti-graffiti paint or similar treatment to SSL approval.
- 4.6.7 The inner face of composite cladding shall be pre-finished white with all fixings penetrating the inner face capped with white plastic cappings.
- 4.6.8 Where the internal skin is constructed from masonry, this shall be 7N/mm² paint grade blockwork with close textured paint grade face, complete with bucket handle mortar joints with a smooth finish to a standard suitable for direct decoration without further making good.
- 4.6.9 Wall ties must comply with the relevant Codes of Practice and shall incorporate all necessary DPC's and cavity trays in accordance with current Building Regulations.
- 4.6.10 Louvers shall have a minimum of 50% free area. Where acoustic louvers are required an increased louver area may be required to achieve the same free air movement. An alternative to acoustic louvers may be for the developer to fund the additional cost of acoustically treating the tenant's plant. Louvers shall be designed and installed in removable sections to SSL's approval to allow plant installation and subsequent removal for replacement and maintenance.
- 4.6.11 Joints between wall panels and between differing cladding materials are to be carefully detailed to ensure the joints run true and are air sealed to achieve the required air leakage rate.
- 4.6.12 External wall construction and associated steel framing where adjacent to boundaries shall be treated to comply with fire boundary compliant with Building Regulations and Fire Officer approval.
- 4.6.13 Form all openings, holes and the like through external walls for windows, external doors, shutters, cash transfer hatches, ATM machines, services, ductwork, pipes, cable trays and other equipment complete with cavity trays, damp proof courses, lintels, flashings, air sealing works, and any secondary support steels required to properly trim out such openings and make them water and air tight. All such works to be coordinated with the SSL fit-out works.
- 4.6.14 Support for SSL wall mounted branding either side of the main entrance lobby will be provided by the developer.

4.7 Glazing and Windows

- 4.7.1 All windows, glazed doors and glazing generally including to shopfront glazing and entrance/exit lobby, are to be polyester powder coated aluminium framed unless planning considerations dictate otherwise. All glazing is to be internally beaded.
- 4.7.2 Fixing of windows and shop-front glazing to the structure shall be by suitably designed, hot-dip galvanised steel or structural aluminium alloy fixings to structural engineer's approval.
- 4.7.3 Window frame and members to be extruded aluminium thermally broken in accordance with manufacturer's design.
- 4.7.4 Shopfront glazing to be double glazed units comprising 6mm high performance Energy NT toughened glass outer skin, 16mm air cavity and 6mm low E inner skin to achieve a thermal co-efficient (U-value) in accordance with current Building Regulations. Developer to assess risks from solar glare and excessive heat gain and to mitigate by application of solar film applied to the respective areas of glazing. Aluminium frame colour Ral 7016.
- 4.7.5 The size of the mullion box within the shop-front glazing will be dependent on the sheet size and the loading calculation based on a generic load of 1 200Pa.
- 4.7.6 Provide upstands to shopfront glazing to provide protection from trolley damage. In areas where an upstand isn't provided install stainless steel trolley protection rails externally in front of glazing at low level in accordance with SSL Standards
- 4.7.7 The internal skin of the shopfront shall have an opaque film applied where display shelving or any internal walls abut the glazing.
- 4.7.8 As part of the glazing specification and solar control strategy, the design is to consider the possibility of thermal fracture of the glass.

4.8 Entrance Lobby & External Doors

- 4.8.1 Main entrance doors to entrance lobby – 1 pair (6k store) or 2 pairs (10k & 15k stores) of 2.4m wide bi-parting doors are to be installed within the shopfront lobby glazing, complete with all motors, sensors, controls, locks, ironmongery generally and power supply cables. Developer is to include for testing and commissioning of the bi-parting doors. All automatic doors must comply with SSL Standards and more generally with relevant guidance from the Automatic Door Suppliers Association (ADSA), BS and EN standards. The Developer should allow for an engineer to attend store launch.
- 4.8.2 Electrically operated security shutters are to be installed to the bi-parting door sets located at the building curtilage complete with all secondary support steelwork, channel guides, shutter casings, motors, sensors, controls, locks, ironmongery generally and power supply cables. The Developer is to include for testing and commissioning of the shutters.
- 4.8.3 2 pairs (6k stores) or 1 pair (10k and 15k stores) of 2.4m wide internal bi-parting doors are to be installed within the lobby complete with all motors, sensors, controls, locks, ironmongery generally and power supply cables. Developer is to include for testing and commissioning of the bi-parting doors. All automatic doors must comply with SSL Standards and more generally with relevant guidance from the Automatic Door Suppliers Association (ADSA), BS and EN standards.
- 4.8.4 Means of escape doors from the building are to be aluminium framed, steel-faced solid core external quality doors complete with all decoration secured with clutch head screws. The doors are to be complete with all frames, thresholds, ironmongery and Maglocks ready for wiring by the SSL fitting-out contractor. Frames are to incorporate anti-jemmy strips to SSL approval.
- 4.8.5 All glazed doors to be internally beaded.

4.8.6 Provide and install electrically operated, fully insulated up and over goods-in door 2.40m wide x 3.00m high to the loading bay. The door is to be complete with all framing to the opening and secondary support steelwork, channel guides, shutter casings, motors, sensors, controls, locks, ironmongery generally and power supply cables. Developer is to include for testing and commissioning of the door. On 15k stores the height of the door increases to 3.65m to accommodate double deck delivery vehicles and will be provided with a double decker dock shelter with electric roller shutter blind.

4.8.7 External fire exit doors require internal laminate finish as per SSL Standards.

4.9 Internal Walls

4.9.1 The back of house dividing wall between the sales area and the warehouse shall be constructed by the developer either in blockwork or jumbo studwork. On 15k stores the wall shall be fire rated to keep compartment area below 2,000sqm, tested and certified and provided complete with all service holes required by SSL. Colleague area is always a separate fire compartment. These openings shall be suitable to receive ductwork with fire dampers. The wall thickness shall be sized to allow vertical chases for conduit of up to 40mm deep without compromising either structural performance or fire integrity. The wall is to include a patress lining up to 2.4m high along the back wall (both sides).

4.9.1 Tenancy division, (compartment) demise walls (if applicable) shall be fair-faced, flush pointed brick with a crushing strength of not less than 7 N/mm² paint grade blocks with the head and joints packed with pre-formed intumescent sealants to achieve the agreed fire rating. "Soft joints" are to be appropriately pointed to provide a clean and tidy finish.

4.9.2 Movement joints, vertical or horizontal, to be fitted with pre-compressed filler and pointed using mastic or fire resisting pointing to provide suitable fire resistances as required to the requirements of the Building Regulations. Sealants to incorporate pest proofing properties where necessary.

4.9.3 All wall construction shall be restrained at the head and provided with no piers unless agreed and deemed necessary to meet structural requirements.

4.10 Finishes and Decorations

4.10.1 The SSL fit-out contract will incorporate most of the finishes, but the shell works shall be ready to receive the respective finishes installed by SSL as follows:

Floors – items in brackets are part of the SSL fit-out works	Location
Concrete floor slab left with a tamped finish to receive terrazzo flooring and screed - 70mm below FFL	Sales area and lobby
Concrete slab with power float finish and dust sealer	Warehouse area, plant rooms, storerooms
Concrete slab left with a power float finish (to receive vinyl tiles and cover skirting)	Colleague areas
Freezer location - 200mm below FFL	Back of house – TBC by store plan
Walls – Items in brackets are part of the SSL fit-out works	
Self-finished internal face of lining to external wall cladding	Sales area, bulk-store, Customer toilets, colleague toilets, offices,
Gyproc metal-stud walling with taped and skimmed joints to sales area/bulk-store compartment wall to receive 3 coats emulsion paint	Sales area, bulk-store area

Soffits	
Self-finished internal face of lining to roof cladding; fixings penetrating the soffit lining to have white plastic caps	All areas of store

- 4.10.2 Structural steel frame to be painted white gloss finish (RAL 9010). Any steelwork in external cavity brick walls shall be painted with two coats of heavy-duty waterproof paint in addition to the corrosion protection coating
- 4.10.3 All external woodwork is to be tanalised timber.
- 4.10.4 Carry out all external decorations in accordance with SSL standards.

4.11 Policy, Fire Safety, Fire Standards and Protection

- 4.11.1 Fire resistance and protection shall comply with the latest revision of the SSL Fire Safety Design Guide document which will safeguard SSL retailing principles.
- 4.11.2 In addition to the requirements of the building regulations, where a new store abuts another shop unit, the fire resistance of party walls or slabs must be established in consultation with Sainsbury's insurers.
- 4.11.3 Fire protection of structural steelwork will generally be achieved with white intumescent paint which will be third party certified on completion with copies provided to SSL.
- 4.11.4 Escape stairs are to be designed to comply with the Building Regulations and, where applicable, BS9999.
- 4.11.5 SSL's Insurance Standards must be complied with in every respect in the design and construction of the shell.

4.12 Access Roads

- 4.12.1 Entrance into the site from the public highway can either be signalled controlled, a priority junction, roundabout or a slip road to comply with the planning authority and highway authority requirements.
- 4.12.2 The car park and service access road design must facilitate the free flow into the site and should be a minimum width of 7.50m for two lanes. Designs must avoid queues but where this is unavoidable, adequate stacking spaces for vehicles queuing to leave the site should be incorporated into the design
- 4.12.3 The road from the highway into the site must offer reasonable separation between the access and the first parking spaces. The length of this road is variable but will need to take into account the projected peak traffic flows.
- 4.12.4 The road and car park construction should be suitable for the axle loads of any appropriate vehicles entering the site. However, road construction for heavy axle loads should be limited to areas where such traffic is likely and is to be agreed with the SSL project Manager.
- 4.12.5 Service vehicles should be segregated from customer vehicles where possible but on this size of store access to the yard through and by manoeuvring in the car park circulation areas is acceptable.
- 4.12.6 Access roads are to be constructed to comply with "The Design Manual for Roads & Bridges" and the surfacing material must be tarmac. The construction of the delivery vehicle route should be designed to accommodate vehicles up to 44 tonnes laden weight, should be a minimum of 7.30m wide at a maximum gradient of 1 in 40 and allow for vehicles 16.50m long and requiring 5.30m clear height.

- 4.12.7 All surfaces must be laid to adequate falls to avoid ponding of rainwater and adequate number of drainage gullies must be provided to all surface water to quickly clear from the road.
- 4.12.8 Road markings shall be consistent and marked out as per Traffic Sign Regulations and General Directions 2016. All markings to car parking area should be marked out in double white lines using thermoplastic and adhere to BS EN 1436:2018.
- 4.12.9 Tactile surface paving shall be used at pedestrian crossing points on access roads and within the site as required by Building Regulations.

4.13 Service Yard

- 4.13.1 The design of the service yard shall facilitate the safe arrival, manoeuvring, rapid offloading and exit of articulated delivery vehicles as per SSL Standards.
- 4.13.2 Service yards shall not incorporate any colleague parking.
- 4.13.3 The road up to the service yard shall be suitable for vehicles of 16.50m length, 44 tonnes laden weight and shall be 7.50m wide with a minimum 5.30m clear headroom (measured from the FFL of the yard paving generally). A concrete transition slab is required between the flexible car park surfacing and the concrete service yard. The detail of this is to be agreed with SSL.
- 4.13.4 The service yard slab will be designed 23.0kN/m² or a knife edge line load of 46kN/m or 57.5kN point load on an area of 300mm x 300mm whichever produces the worst design condition.
- 4.13.5 The service yard is to be large enough to accommodate a delivery vehicle reversing into the yard and unloading using the scissor lift or tailgate lift, tenant waste bins (numbers TBA) and plant area. The layout of the yard shall be approved by SSL.
- 4.13.6 If the site layout dictates that access to the delivery yard is not from the customer car park, the size of the yard shall also accommodate a 26m unrestricted turning circle for vehicle manoeuvring.
- 4.13.7 The finished level at the rear of delivery vehicle standing area shall be the same as the goods in doors. The gradient of the vehicle standing area shall be a maximum of 1:80. The gradients elsewhere in the service yard shall not exceed 1:50 and the access road shall not exceed 1:20. The yard area is to be protected by Armco barriers and pedestrian safety railings.
- 4.13.8 A separate single door is required for access from the service yard into the building next to the goods in door.
- 4.13.9 The yard is to be paved with reinforced in situ concrete with a brushed finish. The design of the paving shall be such to take account of the prevailing ground conditions and be suitable for 2nr 40 tonne laden delivery vehicles each 16.50m long, manoeuvring and standing in the yard.
- 4.13.10 Service yards are to be designed to suit site specific sub-grade CBR using the most onerous of the following load combinations:
- A maximum wheel load of 57.5kN over a contact area of 300mm x 300mm at 1300mm x 2000mm centres.
 - A line load of 46 KN/m
 - A uniformly distributed load of 30kN/m²
- 4.13.11 No structural columns or other obstructions of any kind shall be located in the service yard, with the exception of the canopy structure.
- 4.13.12 The service yard shall be marked out with thermoplastic road paint in accordance with SSL requirements which will be advised to the developer.

- 4.12.13 Provide Armco protection barriers and steel protection bollards in the service yard to provide protection to the store building, items of plant and equipment and the perimeter fencing.
- 4.13.14 Provide a minimum 3m high close board timber fence to the perimeter of the yard, incorporating acoustic attenuation where required by planning conditions. In high-risk areas an alternative non-flammable fence will be required. The minimum height of the fence is to be measured from the highest external ground level immediately adjacent to the fence.
- 4.13.15 The service yard gates are to be manually operated and shall provide a clear opening of minimum of 7.20m. The gates and posts shall be constructed of galvanised steel with the posts fixed to suitably designed concrete foundations. The swing operation of the gates must not obstruct the turning circle or other operational parts of the yard.
- 4.13.16 A dedicated fire exit personnel gate from the service yard will be provided with the appropriate signage and ironmongery.
- 4.13.17 Adequate drainage must be provided to the service yard to allow surface water to quickly clear from the yard area. A drain gulley is to be provided in the waste bin storage area and the trolley wash area, all of which are to be connected to the foul water drainage system.
- 4.13.18 Hose points are to be provided adjacent to both the waste bin storage area and the trolley wash area. These must be connected by a WRAS certificated CAT5 device so that there is no risk of contaminated water (say from a pressure washer) getting back into the domestic water.
- 4.13.19 Install all necessary builder's work associated with the plant and equipment to be located in the service yard including foundation bases and plinths, below ground ducts for pipes, cables and the like.
- 4.13.20 Lighting to the service yard shall be installed including all wiring back to the main SSL LV switch room.
- 4.13.21 Where the service yard is to be fully enclosed with a roof the following services are to be installed:
- General lighting in accordance with Sainsbury's "Service Yard – Services" specification.
 - Emergency lighting in accordance with BS5266.
 - Ventilation for the following criteria:
 - High & Low-Level Extract ventilation discharging to atmosphere.
 - Temperature – ambient.
 - Air change rate – 8AC/H.
 - Pressurisation – Negative.
 - Noise criteria – NC55.
- 4.13.22 The developer is to supply, install and commission a 6No cage scissor lift in accordance with SSL's standard requirements which will be confirmed by the SSL project manager (usually supplied by Easylift Loading Systems but to be confirmed for each site). For 6k and 10k stores this will be a side unloading unit installed on the service yard slab, however for 15k sites the end unloading unit requires a recessed pit. A duct for electrical supplies and drainage in accordance with the manufacturer's details is required for all stores.

4.14 Car Parking and External Areas

- 4.14.1 The customer car park must provide the number of spaces required to comply with the requirements of the planning consent and the approved SDG drawings.
- 4.14.2 The car parking runs should run perpendicular with the store frontage on 10k and 15k stores. For 6k stores typically with smaller car parks this may not apply. The car park shall be laid to a maximum fall of 1:60, sloping away from the store building, and will not be sub-divided by roads or changes in level.

- 4.14.3 The car park surface across the front of the store is to be flush with the pavement to allow customers with trolleys to pass freely to and from the store into the car park. Walkways and pedestrian landing areas should be protected from vehicle flows via the use of bollards: the use of raised kerbs within the car park will not be permitted. Raised kerbing is only permitted at car park perimeters on access roads and around the perimeter of the site.
- 4.14.4 Car park internal flows should be considered and planned for SDG approval and should segregate traffic entering the site from traffic wishing to exit the site. All circulation roads to the external car parking areas shall be two-way and are to be a minimum of 6.50m wide.
- 4.14.5 Ideally there should be no parking bays accessed directly from the main access road to avoid delays caused by vehicles manoeuvring into and out of these bays, however if SSL agree to include spaces here larger comfort bays should be provided (2.70m x 4.80m).
- 4.14.6 If colleague parking is to be provided on the site, the location should be approved by SSL.
- 4.14.7 All standard parking bays shall have a clear minimum size of 4.80 x 2.50m.
- 4.14.8 End reserves on car parking bays should be 2.00m wide, cross hatched in white thermoplastic paint and radiused at 2.00m (minimum 1.20m wide, radiused at 1.20m). The minimum radius on internal bends within the car park should be 4.00m.
- 4.14.9 Road markings shall be consistent and marked out as per the Traffic Sign Regulations and General Directions 2002 and marked out in white thermoplastic paint and comply with BS EN 1436. Thermoplastic marking material should comply with BS EN 1871 and preformed markings should comply with BS EN 1790.
- 4.14.10 The surfacing material for the car park and customer walkways is to be tarmac of appropriate construction for the traffic using the car park. The sub-base is to be designed by the Developer to suit prevailing ground conditions and to be sufficient to prevent any settlement. The wearing course is to be sufficiently smooth to prevent trolley rattle. Joints between different paving finishes are to be smooth to allow free flow of customers with trolleys. All areas shall be laid to sufficient falls to promote drainage to surface drain channels and gullies to prevent ponding of surface water. Where a SUDS is required, permeable smooth finishes providing a suitable surface for trolleys may be used. Paved parking spaces can also be installed for a SUDS.
- 4.14.11 A dedicated parking area for motorcycle parking is to be provided adjacent to the store entrance and the equivalent size of 2nr car parking bays. The parking area should be paved with black concrete block paving on suitable base course and incorporate 'Sheffield' type hoops to allow motorcycles to be chained up.
- 4.14.12 The number of special needs spaces is to be determined as a function of parking ratio figure (ratio figure = standard spaces + Parent & Child spaces) with a 6% ratio figure for Disabled and 4% ratio figure for Parent & Child. The disabled spaces should be provided within a maximum travel distance of 50.00m (45.00m in Scottish stores) from the furthest disabled bay to the store entrance. Where possible both disabled and parent & child spaces should be grouped together with disabled spaces located closer to the store entrance than the parent & child spaces. Both parent & child and disabled spaces should be located away from high demand facilities such as cash machines.
- 4.14.13 A customer pick-up layby will be provided at the front of the store (15k stores only)
- 4.14.14 The disabled parking space must be a clear minimum size of 4.80 x 2.50m with 1 .25m clear hatched area to the side of each space and 1.20m hatch to the rear. The dimensions of the spaces and the surrounding finishes must all be Equality Act compliant and have facility signage with one disabled bay sign every six bays, evenly spaced across all the bays.
- 4.14.15 The Parent & Child parking bay size must be a clear minimum size of 4.80 x 2.50m with 1 .25m clear hatched area to the side of each space. There will be a minimum of one Parent & Child parking bay sign every six bays, evenly spaced across all the bays.

- 4.14.16 Covered trolley storage is required at the front of the store, usually under an extended roof overhang as shown on the approved SDG drawings and to comply with SSL Specs & Standards. The developer will supply and install stainless steel hoops to form the storage area in accordance with SSL standards.
- 4.14.17 At vehicle and pedestrian exit points from the site, an electronic buried loop system is to be incorporated into the paving and landscaping. The SSL approved system is supplied by Gatekeeper (formerly Cartronic) wheel system which consists of an electrical loop installed in the road and pedestrian paving which activates and locks brakes fitted to the wheels of the trolleys when they pass of the device strip. The wire forming the 'locking loop' will be installed into a saw cut made in the paving surface (approx.10mm wide and 25-50mm deep) which is filled with silicone mastic. The route of the cable will be picked out by a broad red line painted onto the paving in thermoplastic road marking paint, to identify locking points to the customers. Site specific solutions should be agreed with SSL and their specialist supplier.
- 4.14.18 Where approved by SSL pedestrian ramps shall have a gradient no greater than 1:30. Surfacing immediately in front of the store shall be flush with the car park and carefully finished against the building, around columns and any other features adjacent to the store entrance.
- 4.14.19 Fire exit and maintenance paths, where away from regular customer routes, may use low-cost paving or tarmac. SSL approval to the location and use of these paths must be obtained. The paths should have a well compacted surface suitable for use by customers in wheelchairs, wearing high heels or with pushchairs.
- 4.14.20 In areas where trolleys will be used, steel rail protection must be provided to protect the face of the building, shopfront, canopy columns, rainwater pipes and any other projections. It must be designed to avoid becoming a tripping hazard, especially at corner situations.
- 4.14.21 Bollards are to be used to separate pedestrians from vehicular traffic and service traffic in accordance with SSL Standards. The following guidance shall be adhered to:

Bollard protection on walkways:

- Standard parking bays to be staggered by 1.25m and specialist parking bays to be staggered by 1.25 on walkways with one bollard located centrally per bay.
- Bollards set out at 3.75m centres on walkways with specialist parking bays.
- Bollards set out at 2.50m centres on walkways with 2.50m standard parking bays.

Bollard protection along the store frontage:

- Bollards should be set out at 1.80m centres along the store frontage in front of glazed and non-glazed areas.
- Bollards should be set out at 3.75m centres in instances where disabled or Parent and Child bays are located in front of non-glazed areas around the side of the store.
- Bollards should be set out at 1.25m centres where 2.50m specialist parking bays are sited in front of glazed areas.
- Bollards should be set out at 1.20m centres where 2.40m specialist parking bays are sited in front of glazed areas.
- Anti-ram Raid Bollards shall be fitted to protect store entrances and exits, fire exits, shop front glazing, ATM machines and ATM 'Pods'.

Anti-ram Raid Bollards in front of ATM's should be set 2.0m back from the ATM and spaced at 1.35m centres.

- 4.15.22 Where it is necessary to prevent pedestrian or trolley movement into roadways and the use of bollards would be inappropriate, the developer shall install galvanised steel railings to an SSL approved design.

- 4.14.23 Uncontrolled crossings with beacons and zigzags should be provided on main access roads. Uncontrolled crossings with beacons should be provided at the front of the store and on primary pedestrian routes and links to offsite footpaths. Uncontrolled crossings without beacons should be provided on secondary pedestrian routes running across parking aisles.
- 4.14.24 Bicycle parking should be provided in accordance with the planning consent. Bicycle hoops should be located under cover and close as possible to the store entrance. Where there is a demand for secure colleague bicycle parking, dedicated lockers should be provided away from customer facing areas. If the site is served by a bicycle path, the path should terminate at the point of entry to the site and the bicycle parking area should be easily accessible from it.
- 4.14.25 The type of bicycle hoop, covered bicycle shelter or secure bicycle lockers must comply with SSL's standards.
- 4.14.26 Where there is a requirement to increase awareness of vehicular speeds, 5 or 10mph speed limit roundels (TBC by SSL) are to be marked out on the carriageway and electronic speed awareness signs may be installed. Where there is a specific requirement to reduce vehicular speeds, speed cushions may be installed to SSL's standards. The introduction of speed cushions must not impact on the use of trolleys within the main body of parking.
- 4.14.27 The developer should consult with SSL as to whether the car park management equipment or parking guidance equipment is required and should be provided in accordance with SSL standards.
- 4.14.28 The developer will be responsible for supplying and installing litter bins, grit bins and seating in accordance with SSL standards.
- 4.14.29 Electric Vehicle Charging Points (EVCPs) - The developer shall provide and install ducts and bases to SSL Standards to the designated electric vehicle charging bays which will be confirmed by SSL on a site-by-site basis. GRP enclosures for the SSL LV panel and CPU/s will be provided in the car park near the EVCP spaces with ducts connecting these together and to the main store incoming LV panel or transformer where there is an HV supply for the site. The total load for the store and EVCPs will be confirmed by the SSL project manager. The number of active and passive (future) EVCP spaces is to be determined on site-by-site basis and to satisfy planning.

Walls and Fences

- 4.14.30 Provide boundary walls and fencing to the perimeter of the site in accordance with the requirements of the site layout, planning consent and SSL. These must provide appropriate levels of security and resistance to vandalism. Where appropriate, high-quality designs should be located at the site entrance and in heavily trafficked areas. All other areas should be of a low maintenance design.
- 4.12.31 Provide a minimum of a 450mm timber knee rail to direct pedestrians away from planting level changes or other vulnerable areas and to prevent trolleys being taken off site.

External Signage

- 4.14.32 SSL will design all signage to the external car park and external areas and will supply these to the developer to store securely, protect from damage, and install on appropriate foundation bases.
- 4.14.33 The developer will provide a suitable foundation with a duct to the SSL LV switchroom for the totem signs to enable installation of the sign by SSL.

On multi-occupancy sites, the developer will provide and install an illuminated main site totem sign to be located at the site entrance and will obtain planning consent for this sign, the design of which is to be approved by SSL.

External Lighting

- 4.14.34 Provide and install lighting to the store entrance canopy, car park, service yard, goods canopy, and external areas as detailed in the latest version of the SSL "Lighting Specification, External Lighting" standards.
- 4.14.35 Security lighting is required to provide illumination to 'black hole' areas around the building exterior (including plant area) to enhance security aspects of the site.
- 4.14.36 In order to prevent light spillage onto local and adjacent 'sensitive' residential areas, where applicable the column lanterns shall be complete with suitable rear of lantern mounted 'baffle' plate.
- 4.14.37 Adequate lighting to the general car parking areas with special emphasis to all vehicular routes, pedestrian crossings, staircases and ticket machines etc. must be provided.
- 4.14.38 Low level protection is to be provided to all lighting columns as SSL Standards

ATM Pod Installations

- 4.14.39 SSL may elect to install a free-standing ATM pod housing a number of cash dispensing machines. If this is confirmed by SSL, the Developer will be required to construct a reinforced concrete slab to accommodate the load from the pod and prevailing ground conditions complete with ducts back to the store building for power and data services plus associated security bollards.

4.15 Below Ground Drainage

- 4.15.1 Drainage will be by gravity only unless unavoidable and agreed by SSL. Discharge of surface water to the foul water sewer, discharge of foul water to the surface water system or discharge of ground water to any public sewer system shall be not permitted. Under no circumstances shall public surface water or foul water drains be routed beneath the store building or service yard.
- 4.15.2 The below ground drainage system is to be designed with adequate provision of accessible manholes, rodding points for ease of maintenance, be vented throughout and be designed to comply with current Building Regulations.
- 4.15.3 The developer shall design and construct the drainage installations strictly in accordance with the provisions of the current Building Regulations, BS EN752 and where applicable 'Sewers for Adoption' published by Water UK.

Foul Drainage

- 4.15.4 The foul drainage system shall be designed based on the discharge unit's method described in BS EN 12056. Foul drainage shall be designed to be self-cleansing, shall be a minimum of 100mm in diameter and shall be vented to atmosphere at the head of all main runs. In addition to the main foul system, the following areas shall also be connected to the foul drains:
 - Scissor lift pit with trapped gullies.
 - External waste bin storage area via surrounding channel drains and sump.
 - Plant rooms via trapped gullies.

Refrigeration Condensate Drainage

- 4.15.5 The condensate drainage system shall be designed in accordance with the building regulations and SSL Standards.

- 4.15.6 The condensate drainage system shall be kept separate until its final connection to the foul drainage system. Prior to connection to the foul drainage system, the condensate drains shall be protected by means of an anti-flood device as manufactured by Aco building drainage, or equivalent approved, incorporating an overflow gulley to provide a failsafe system which would discharge externally should a blockage occur.
- 4.15.7 In cases where a separate system is not possible, the alternative is normally a pumped system which is only acceptable by agreement with the Sainsbury's Project Manager.
- 4.15.8 All new condensate drainage is to be installed in 100mm diameter pipework in accordance with SSL Standards.
- 4.15.9 All new condensate drainage pop-ups are to be located to suit the SDG3 plan and are to be finished 110mm above the finished floor level and capped off with suitable removable cap ends; these are only to be removed when final header pipe connections are ready to be made. As a guide SSL require a minimum of 1 pop-up for every 4 refig cases
- Any 110mm diameter condensate drainage pipework installed within the floor duct or installed in the ground must have adequate means of access/rodding for maintenance on all changes of direction using small heavy-duty access covers as manufactured by Messrs Howe Green 7500 series or equivalent.
- 4.15.10 All refrigeration cases and frozen food cases etc. shall be trapped above slab level with appropriate water seals prior to their connection to the condensate drainage system (as required by BS EN 12056 British standards code of practice for above ground drainage).
- 4.15.11 The condensate drainage system designed to reflect the requirements of SSL's refrigeration specialist and the developer is to liaise with the refrigeration contractor to ensure the exact requirements are obtained. **Surface Water Drainage**
- 4.15.12 Surface Water drains shall be designed to provide a minimum self-cleansing velocity of 0.76 m/s. The drains shall be designed to accommodate a flat rate rainfall of 60mm/hour and shall be a minimum of 100mm in diameter. Drainage proposals are to be approved by SSL.
- 4.15.13 Where attenuation is required by the Planning Authority, Water Authority or the Environment Agency, the attenuation volume shall be achieved by means of a flow control appropriate to the storm return period as agreed with the Authority. Attenuation shall be provided by means of Sustainable Urban Drainage Techniques such as ponds, swales and storage systems applicable to the particular location. Permeable block paving is not acceptable where wheeled trolleys are to operate such as car park circulation roads and pedestrian paths cross the car park or around the shopfront.
- 4.15.14 The surface water drainage system shall incorporate petrol/oil separators in car parks and service yards to protect the downstream environment from contamination. The separators shall be fitted with an alarm to indicate when emptying is required. Clean water from roof areas shall not pass-through petrol/oil interceptors.
- 4.15.15 Soakaways shall be avoided wherever possible. However, where unavoidable, the design shall be approved by the Environment Agency and subject to percolation tests and designed in accordance with BRE 365 to cater for a minimum return period of 10 years. Such circumstances shall be immediately advised to SSL.
- 4.15.16 Gullies and channel gratings shall be specified and installed to withstand the wheel loading of vehicles, motorcycles and bicycle using the area in which they are located. Gully/channel covers shall be specified and installed so as not to constitute a hazard to trolley users.

Generally

- 4.15.17 Drainpipes shall be vitrified clay, cast iron or solid wall uPVC in accordance with the relevant British Standard. Vitrified clay or uPVC shall be used for foul drainage installations. The Developer shall also consider the effects of soil contamination on the drainage installations and shall take appropriate measures to prevent damage to the below ground drain installations and fittings and possible contamination seepage into the drain systems.
- 4.15.18 Manholes shall be provided at all changes of direction or where more than one branch drain joins the main drain run, or where side or spur connections serve one or more toilet(s). Internal manholes shall be kept to a minimum, but in any case, shall not be permitted within the sales area, food preparation areas or the JS customer restaurant. Where SSL grant consent for internal manholes, they are to incorporate recessed covers for filling with the particular floor finish and shall be provided with double seal lockable covers in stainless steel or aluminium such as are manufactured by Messrs Howe Green 7500 Series Covers or equivalent.
- 4.15.19 Manholes and inspection chambers shall be constructed in accordance with Building Regulations and Sewers for Adoption as appropriate with covers and frames of adequate strength for foot or vehicular traffic as necessary.
- 4.15.20 Manhole covers in car parks and other trafficked areas are to be of a heavy-duty non-rock design suitable for the vehicles using the specific area (i.e., suitable for HGVs on service route and all external areas. Suitable for cars and vans in the car park.).
- 4.15.21 All sewers constructed by the Developer that are to be offered for adoption by the Water Authority shall be constructed in accordance with 'Sewers for Adoption' and any specific requirements of the Water Authority and shall be completed to their satisfaction and maintained at the Developer expense until adoption has been formally completed. Where applicable, the Developer shall include for all fees and the bond required by the Water Authority in connection with the works offered for adoption.
- 4.15.22 Sewers to be offered for adoption shall not pass under the site. Any building construction adjacent to sewers will require prior approval of the Water Authority and this consent shall be the responsibility of the Developer. The Developer shall ensure that any necessary easements, transfer of land, and/or Agreements to be entered into in relation to the drainage works are completed accordingly.
- 4.15.23 On completion of the works the Developer shall ensure that the entire drainage installation is carefully tested by means of an air or water test. Any leaks or blockages are to be exposed and made good and the system shall be jetted out prior to handover. Copies of the successful test validation certificates shall be provided to SSL.
- 4.15.24 The Developer shall arrange to provide to SSL a plastic laminated drainage schematic for the development together with a schedule of maintenance for the following items:
- Oil Interceptors – Biannual checks and emptying.
 - Road gullies and channel drains – Biannual cleaning and rodding particularly after the Autumn.
 - Foul drains – Quarterly inspection and cleansing to be carried out particularly areas where food processing occurs.
 - Pumped Systems – Regular checks shall be carried out by the maintenance contractor at times to be agreed.
- 4.15.25 Grease traps will be installed during the fit out if required. Please refer to SSL Engineering Fats, Oils & Grease Specification for details.

4.16 Landscaping

- 4.16.1 A low-maintenance landscaping design is required and is to be approved by SSL prior to submission to the local Planning Authority.

- 4.16.2 In the production of the planting scheme, the store is to be as prominent as possible within the local environment and sightlines to the customer entrance are to be maintained throughout all seasons. Perimeter planting is to be detailed to strike a balance between visibility of the store and any requirements for screening. Where some screening is required, key views into the site must be identified and maintained. These should include for visibility of gantry signs, store entrance, signage on store, locations for banner advertising and, if applicable, the petrol filling station.
- 4.16.3 Screening may be introduced to areas such as service yard, boundaries with residential areas and rear of store where it will not compromise principles set out above.
- 4.16.4 No soft landscaping is to be located within 5m of any SSL plant areas.
- 4.16.5 The design is also to ensure landscaping doesn't block sightlines or CCTV within the site which help maintain a safe environment.
- 4.16.6 Planting within car park areas is to be avoided, particularly at circulation road junctions and at the end of car park bay runs. Planting is to be restricted to the site perimeter/boundaries of the car park.
- 4.16.7 Appropriate ground cover species are to be used to keep sightlines clear at entrances and exits to site, junctions, pedestrian crossings, internal planting areas and other key areas. Ground cover plants to be chosen for their low habit and ease of cutting back/boxing up. Grassed areas are not acceptable due to ongoing maintenance requirements.
- 4.16.8 Planting is to be detailed to design out potential rodent issues, specific areas of concern are recycling points and service areas. Habit and form of plants are to be considered to avoid provision of cover and litter traps. Potential 'bridges' are to be avoided by provision of trees too close to building or use of climbers. Spiked or prickly shrubs are to be avoided in all cases to reduce litter trapping and potential injury to customers and employees. Use of evergreen shrubs is to be maximised to give year-round cover and reduce accumulations of litter.
- 4.16.9 Permanent/temporary protection for planting shall be incorporated in vulnerable areas. Use of post and wire, chain line, chestnut pale and knee-rail fencing is to be considered as appropriate.
- 4.16.10 Special attention is to be given during the design stage to the ongoing landscape maintenance of the site. Trees and shrubs are to be chosen to provide for a minimum of ongoing maintenance. Due consideration is to be given to growth rates, weed suppression, form and ease of cutting back/pruning. Ongoing irrigation after year one is to be designed out by species selection, planting area layout and topsoil depth/quality. Balancing ponds to be considered where space allows as a storage area for water.
- 4.16.11 The following specification criteria shall be adhered to by the Developer:
- Topsoil to be general purpose grade to BS 3882:1994, 400mm depth to planting areas.
 - Tree pits within soft landscape areas to be 1m x 1m x 1m deep.
 - Tree pits in hard landscaping areas to be 2m x 2m x 1m deep, backfilled with compacted Urban Tree Soil.
 - Topsoil to be improved prior to planting by incorporating 50mm depth compost.
 - Trees up to 16-18cm girth to be double staked and tied, trees above this size to be underground guyed.

4.17 Off-Site Road Works

- 4.17.1 The developer is to complete all necessary highway works required by the planning consent prior to Practical Completion of the store including all alterations to statutory services.

4.18 Incoming Services

Electrical Supply

- 4.18.1 The developer will provide an LV supply to the store in accordance with the supply capacity confirmed by the SSL project manager. Indicative requirements are stated in Appendix B. If an HV substation and transformer is required to provide the LV supply, the location will be agreed - typically adjacent to the service yard such that the Distribution Network Operator (DNO) has 24-hour access to it without needing to gain access through the service yard.
- 4.18.2 The developer will provide all enclosures, concrete bases and access pits and ducts complete with draw wires and all other necessary builder's work required by the DNO and for the transformer and to the mains panel location internally.
- 4.18.3 The developer will provide a weatherproof, lockable metal, GRP or brick-built enclosure with plywood backboard for electrical metering equipment. The enclosure is typically 1400mm high, 1000mm wide and 400mm deep.
- 4.18.4 The developer will provide a duct or suitable containment route from the DNO's fuse equipment to SSL's meter enclosure.
- 4.18.5 The developer will install an independent earthing system and duct network complete with draw wires to allow connection to the store main earth bar. The earth system must provide a resistance of one ohm or less.
- 4.18.6 The developer will copy all supply application documentation to SSL's project manager.
- 4.18.7 If The developer will ensure that the HV supply incorporates a HV tripping facility with battery or capacitor back up. SSL's electrical contractor shall supply and connect one or two break glass push buttons and provide interconnecting cabling to the tripping facility. The developer shall advise the fit-out contractor of the tripping circuit type and issue a wiring diagram.
- 4.18.8 Power and control circuits associated with critical or life safety functions shall be cabled/installed using LPCB/BASEC approved fire rated cabling in accordance with BS9999 and BS8519. Where dual supplies are required for line safety systems, alternative diverse cable routes shall be used.

Gas Supply

- 4.18.9 A gas supply is not required.

Water Supply

- 4.18.10 The developer is to provide a water supply in accordance with the supply capacity confirmed by the SSL project manager. Indicative requirements are stated in Appendix B. MDPE supply pipe subject to pressure. The supply shall terminate near the unloading bay 500mm above finished floor level in the unloading bay or other location agreed with the SSL project manager. The service shall terminate with an isolating valve and capped end.
- 4.18.11 Any water pipework passing through potentially contaminated land must be run in 'protecta-line' type barrier pipe, so that there can be no risk of leakage of ground contaminants through the pipe into the water service. Also refer to SSL Standards.
- 4.18.12 The developer will provide all associated builders work, ducts with draw wires as required by the Regional Water Authority for the incoming water service and water meter.

- 4.18.13 The developer shall copy all supply application documentation to the SSL project manager.
- 4.18.14 The developer shall advise the meter installation date to the SSL project manager.
- 4.18.15 Provide a fully accessible service route from the meter location to the store to enable BMS cabling to be installed where the meter is located remotely.

Telephones & data

- 4.18.16 The developer is to provide and install underground ducts complete with draw cords and draw pits to agreed locations within the store for the installation of the incoming data and telephone service. SSL will advise the number of incoming lines and ducts required and this is likely to include 1 no. incoming duct into the domestic area and 1 no. at the shop front for the cash machine together with any plant requiring a data connection.

In addition, the developer is to provide a Single order Generic Ethernet Access (SoGEA) circuit for fixed line connectivity to the building which is to include an incoming DP within a dedicated area (the processor room). An order to Openreach must be placed and the circuit installed a minimum of 16 weeks ahead of the store opening date.

If a SoGEA is not available within the local area / exchange, an FTTC circuit is to be provided which is to include an incoming DP within a dedicated area (the processor room) through an order to Openreach and the circuit installed a minimum of 16 weeks ahead of store opening date.

If FTTC is not available within the local area / exchange, Dual Ethernet is to be provided which is to include an incoming Fibre DP (OTE) within a dedicated area (the processor room) through an order to Openreach and the circuit installed a minimum of 18 to 20 weeks ahead of store opening date. If a Dual Ethernet circuit is to be provided, an uninterrupted, standard twin socket 240v 3 pin power supply x2 must also be provided to the OTE box (Fibre DP) which MUST be installed within the processor room and remain powered up.

- 4.18.17 The Developer shall provide and install a fire hydrant water main and hydrant points as required to comply with Building Regulations, in locations to be agreed with SSL.

Generally

- 4.18.18 The developer shall take account of any ground contamination on the site and ensure that the specification of all below-ground ducts and chambers, all electrical supply cables, water supply pipes, gas supply pipes and all other ducted or buried services is specified or suitably protected to prevent damage by the contamination material.
- 4.18.19 The routes of all below-ground services installations and positions of all services equipment are to be agreed with SSL.
- 4.18.20 The developer shall cap-off and remove all redundant services crossing the site. Where existing services which cross the site are to be maintained, the developer shall arrange for their diversion around the perimeter of the site ensuring that no services are routed beneath the store building, the service yard or, if applicable, the site of the petrol filling station. The developer shall ensure that any future store extension planned into the scheme is not compromised by the presence of existing or re-routed services pipes and cables.
- 4.18.21 Incoming supply meters will be provided by SSL.
- 4.18.22 The Developer is to provide separate ducts with draw cords and pits in agreed locations for the installation by SSL of a minimum of 4 external IP CCTV cameras for general surveillance of the store entrance and surface car park and 4 Automatic Number Plate Recognition (ANPR)

cameras mounted on columns in locations that will provide coverage of the store access and egress points. Ideally cameras to be located on the lighting columns if not possible the developer should include for the supply of galvanised steel CCTV poles to SSL Standards.

APPENDIX A

PROJECT REQUIREMENTS

APPENDIX B

INCOMING STATS SCHEDULE

1. Incoming Services – Typical Incoming Services Requirements for Small Superstores											
Area (ft²)	Area (m²)	Suggested Van Charging	Suggested Car Charging	Suggested Base Electrical Maximum Demand (kVA)	Suggested Natural Gas Maximum Demand (kWh, m³/h)	Suggested Mains Water Connection (MDPE, Outside diameter)	Suggested Sprinkler Unmetered Connection (MDPE, OD)	Telephone Lines	Generator Size (kVA)	Transformer Size (kVA)	
<6,000	<	site by site basis	site by site basis	135	n/a	35mmØ, 0.93 l/s		Allow 50pr - TBC by SSL	N/A however, SSL to Confirm	LV	EV charging requirements will be assessed on a site by site basis and added to the stated load for each development
<8,000	<	site by site basis	site by site basis	165	n/a	42mmØ, 1.06 l/s		Allow 50pr - TBC by SSL	N/A however, SSL to Confirm	LV	EV charging requirements will be assessed on a site by site basis and added to the stated load for each development
<10,000	<	site by site basis	site by site basis	200	n/a	42mmØ, 1.22 l/s		Allow 50pr - TBC by SSL	60kVA - SSL to Confirm	LV	LV Connection subject to DNO otherwise 500kVA transformer. EV charging requirements will be assessed on a site by site basis and added to the stated load for each development
<12,000	<	site by site basis	site by site basis	235	n/a	42mmØ, 1.41 l/s		Allow 50pr - TBC by SSL	60kVA - SSL to Confirm	LV	LV Connection subject to DNO otherwise 500kVA transformer. EV charging requirements will be assessed on a site by site basis and added to the stated load for each development
<15,000	<	site by site basis	site by site basis	275	n/a	42mmØ, 1.63 l/s		Allow 50pr - TBC by SSL	60kVA - SSL to Confirm	LV	LV Connection subject to DNO otherwise 500kVA transformer. EV charging requirements will be assessed on a site by site basis and added to the stated load for each development

APPENDIX C

MODEL STORE DRAWINGS – 6K STORE

These are available on request from SSL

APPENDIX D

MODEL STORE DRAWINGS – 10K STORE

These are available on request from SSL.

APPENDIX E

MODEL STORE DRAWINGS – 15K STORE

These are available on request from SSL.