Development Control
Gloucester City Council
PO Box 3252, Gloucester, GL1 9FW
01452 396396
development.control@gloucester.gov.uk
www.gloucester.gov.uk/planning

Application for Planning Permission

Town and Country Planning Act 1990 (as amended)

Publication of applications on planning authority websites

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

Site Location

Disclaimer: We can only make recommendations based on the answers given in the questions.

If you cannot provide a postcode, the description of site location must be completed. Please provide the most accurate site description you can, to help locate the site - for example "field to the North of the Post Office".

Number

Suffix

Property Name

Address Line 1

Sandyleaze

Address Line 2

Longlevens

Address Line 3

Town/city

Gloucester

Postcode

GL2 0PU

Description of site location must be completed if postcode is not known:

Easting (x)

385843

Northing (y)

219191

Description

Garages at Sandyleaze, Longlevens

Applicant Details

Name/Company

Title

First name

Surname

.

Company Name

Gloucester City Homes

Address

Address line 1

C/O Agent

Address line 2

9 College Green

Address line 3

Town/City

Gloucester

Country

Postcode

GL1 2LX

Are you an agent acting on behalf of the applicant?

- [x] Yes
- [ ] No

Contact Details

Primary number

Secondary number

Fax number

Email address

Agent Details

Name/Company

Title

First name

Mark

Surname

Godson

Company Name

SF Planning Limited

Address

Address line 1

9 College Green

Address line 2

Address line 3

Town/City

Gloucester

Country

United Kingdom

Postcode

GL1 2LX

Contact Details

Primary number

***** REDACTED ******

Secondary number

Fax number

Email address

***** REDACTED ******

Site Area

What is the measurement of the site area? (numeric characters only).

0.10

Unit

Hectares

Description of the Proposal

Please note in regard to:

- **Fire Statements** - From 1 August 2021, planning applications for buildings of over 18 metres (or 7 stories) tall containing more than one dwelling will require a 'Fire Statement' for the application to be considered valid. There are some exemptions. View government planning guidance on fire statements or access the fire statement template and guidance.
- **Permission In Principle** - If you are applying for Technical Details Consent on a site that has been granted Permission In Principle, please include the relevant details in the description below.
- **Public Service Infrastructure** - From 1 August 2021, applications for certain public service infrastructure developments will be eligible for faster determination timeframes. See help for further details or view government planning guidance on determination periods.

Description

Please describe details of the proposed development or works including any change of use

Redevelopment of land at Sandyleaze, Longlevens for the provision of 2no. bungalows with associated parking and landscaping.

Has the work or change of use already started?

◯ Yes
⊘ No

Existing Use

Please describe the current use of the site

Garages and hardstanding.

Is the site currently vacant?

◯ Yes
⊘ No

Does the proposal involve any of the following? If Yes, you will need to submit an appropriate contamination assessment with your application.

Land which is known to be contaminated

◯ Yes
⊘ No

Land where contamination is suspected for all or part of the site

◯ Yes
⊘ No

A proposed use that would be particularly vulnerable to the presence of contamination

◯ Yes
⊘ No

Materials

Does the proposed development require any materials to be used externally?

⊘ Yes
◯ No

Please provide a description of existing and proposed materials and finishes to be used externally (including type, colour and name for each material)

Type:
Walls

Existing materials and finishes:

Proposed materials and finishes:
Render/brick

Type:
Roof

Existing materials and finishes:

Proposed materials and finishes:
Grey concrete tiles

Type:
Windows

Existing materials and finishes:

Proposed materials and finishes:
Grey, UPVC

Type:
Doors

Existing materials and finishes:

Proposed materials and finishes:
Secured by Design doorsets.

Are you supplying additional information on submitted plans, drawings or a design and access statement?

⊘ Yes
◯ No

If Yes, please state references for the plans, drawings and/or design and access statement

Please refer to Covering Letter.

Pedestrian and Vehicle Access, Roads and Rights of Way

Is a new or altered vehicular access proposed to or from the public highway?

◯ Yes
⊘ No

Is a new or altered pedestrian access proposed to or from the public highway?

◯ Yes
⊘ No

Are there any new public roads to be provided within the site?

◯ Yes
⊘ No

Are there any new public rights of way to be provided within or adjacent to the site?

◯ Yes
⊘ No

Do the proposals require any diversions/extinguishments and/or creation of rights of way?

◯ Yes
⊘ No

Vehicle Parking

Does the site have any existing vehicle/cycle parking spaces or will the proposed development add/remove any parking spaces?

⊘ Yes
◯ No

Please provide information on the existing and proposed number of on-site parking spaces

Vehicle Type:
Cars

Existing number of spaces:
0

Total proposed (including spaces retained):
4

Difference in spaces:
4

Trees and Hedges

Are there trees or hedges on the proposed development site?

◯ Yes
⊘ No

And/or: Are there trees or hedges on land adjacent to the proposed development site that could influence the development or might be important as part of the local landscape character?

◯ Yes
⊘ No

If Yes to either or both of the above, you may need to provide a full tree survey, at the discretion of the local planning authority. If a tree survey is required, this and the accompanying plan should be submitted alongside the application. The local planning authority should make clear on its website what the survey should contain, in accordance with the current 'BS5837: Trees in relation to design, demolition and construction - Recommendations'.

Assessment of Flood Risk

Is the site within an area at risk of flooding? (Check the location on the Government's Flood map for planning. You should also refer to national standing advice and your local planning authority requirements for information as necessary.)

◯ Yes
⊘ No

Is your proposal within 20 metres of a watercourse (e.g. river, stream or beck)?

◯ Yes
⊘ No

Will the proposal increase the flood risk elsewhere?

◯ Yes
⊘ No

How will surface water be disposed of?

☑ Sustainable drainage system

☐ Existing water course

☐ Soakaway

☐ Main sewer

☐ Pond/lake

Biodiversity and Geological Conservation

Is there a reasonable likelihood of the following being affected adversely or conserved and enhanced within the application site, or on land adjacent to or near the application site?

To assist in answering this question correctly, please refer to the help text which provides guidance on determining if any important biodiversity or geological conservation features may be present or nearby; and whether they are likely to be affected by the proposals.

a) Protected and priority species

◯ Yes, on the development site
◯ Yes, on land adjacent to or near the proposed development
⊘ No

b) Designated sites, important habitats or other biodiversity features

◯ Yes, on the development site
◯ Yes, on land adjacent to or near the proposed development
⊘ No

c) Features of geological conservation importance

◯ Yes, on the development site
◯ Yes, on land adjacent to or near the proposed development
⊘ No

Supporting information requirements

Where a development proposal is likely to affect features of biodiversity or geological conservation interest, you will need to submit, with the application, sufficient information and assessments to allow the local planning authority to determine the proposal.

Failure to submit all information required will result in your application being deemed invalid. It will not be considered valid until all information required by the local planning authority has been submitted.

Your local planning authority will be able to advise on the content of any assessments that may be required.

Foul Sewage

Please state how foul sewage is to be disposed of:

- ☐ Mains sewer
- ☐ Septic tank
- ☑ Package treatment plant
- ☐ Cess pit
- ☐ Other
- ☐ Unknown

Are you proposing to connect to the existing drainage system?

- ○ Yes
- ⊘ No
- ○ Unknown

Waste Storage and Collection

Do the plans incorporate areas to store and aid the collection of waste?

- ⊘ Yes
- ○ No

If Yes, please provide details:

In accordance with the local authority's usual arrangements.

Have arrangements been made for the separate storage and collection of recyclable waste?

- ⊘ Yes
- ○ No

If Yes, please provide details:

In accordance with the local authority's usual arrangements.

Trade Effluent

Does the proposal involve the need to dispose of trade effluents or trade waste?

- ○ Yes
- ⊘ No

Residential/Dwelling Units

Does your proposal include the gain, loss or change of use of residential units?

- [x] Yes
- [ ] No

Please note: This question is based on the current housing categories and types specified by government.

If your application was started before 23 May 2020, the categories and types shown in this question will now have changed. We recommend that you review any information provided to ensure it is correct before the application is submitted.

Proposed

Please select the housing categories that are relevant to the proposed units

- [ ] Market Housing
- [x] Social, Affordable or Intermediate Rent
- [ ] Affordable Home Ownership
- [ ] Starter Homes
- [ ] Self-build and Custom Build

Social, Affordable or Intermediate Rent

Please specify each type of housing and number of units proposed

Housing Type:
Other

1 Bedroom:
2

2 Bedroom:
0

3 Bedroom:
0

4+ Bedroom:
0

Unknown Bedroom:
0

Total:
2

Proposed Social, Affordable or Intermediate Rent Category Totals	1 Bedroom Total	2 Bedroom Total	3 Bedroom Total	4 Bedroom Total	Unknown Bedroom Total	Bedroom Total
	2	0	0	0	0	2

Existing

Please select the housing categories for any existing units on the site

- [ ] Market Housing
- [ ] Social, Affordable or Intermediate Rent
- [ ] Affordable Home Ownership
- [ ] Starter Homes
- [ ] Self-build and Custom Build

Totals

Total proposed residential units	2
Total existing residential units	0
Total net gain or loss of residential units	2

All Types of Development: Non-Residential Floorspace

Does your proposal involve the loss, gain or change of use of non-residential floorspace?
Note that 'non-residential' in this context covers all uses except Use Class C3 Dwellinghouses.

◯ Yes
⊘ No

Employment

Are there any existing employees on the site or will the proposed development increase or decrease the number of employees?

◯ Yes
⊘ No

Hours of Opening

Are Hours of Opening relevant to this proposal?

◯ Yes
⊘ No

Industrial or Commercial Processes and Machinery

Does this proposal involve the carrying out of industrial or commercial activities and processes?

◯ Yes
⊘ No

Is the proposal for a waste management development?

◯ Yes
⊘ No

Hazardous Substances

Does the proposal involve the use or storage of Hazardous Substances?

◯ Yes
⊘ No

Site Visit

Can the site be seen from a public road, public footpath, bridleway or other public land?

- [x] Yes
- [ ] No

If the planning authority needs to make an appointment to carry out a site visit, whom should they contact?

- [x] The agent
- [ ] The applicant
- [ ] Other person

Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application?

- [x] Yes
- [ ] No

If Yes, please complete the following information about the advice you were given (this will help the authority to deal with this application more efficiently):

Officer name:

Title

First Name

***** REDACTED ******

Surname

***** REDACTED ******

Reference

21/01076/PREAPP

Date (must be pre-application submission)

23/11/2021

Details of the pre-application advice received

Principle of development is acceptable subject to compliance with other material planning considerations.

Authority Employee/Member

With respect to the Authority, is the applicant and/or agent one of the following:
(a) a member of staff
(b) an elected member
(c) related to a member of staff
(d) related to an elected member

It is an important principle of decision-making that the process is open and transparent.

For the purposes of this question, "related to" means related, by birth or otherwise, closely enough that a fair-minded and informed observer, having considered the facts, would conclude that there was bias on the part of the decision-maker in the Local Planning Authority.

Do any of the above statements apply?

◯ Yes
⊘ No

Ownership Certificates and Agricultural Land Declaration

Certificates under Article 14 - Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended)

Please answer the following questions to determine which Certificate of Ownership you need to complete: A, B, C or D.

Is the applicant the sole owner of all the land to which this application relates; and has the applicant been the sole owner for more than 21 days?

⊘ Yes
◯ No

Is any of the land to which the application relates part of an Agricultural Holding?

◯ Yes
⊘ No

Certificate Of Ownership - Certificate A

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/ the applicant was the owner* of any part of the land or building to which the application relates, and that none of the land to which the application relates is, or is part of, an agricultural holding**

*** "owner" is a person with a freehold interest or leasehold interest with at least 7 years left to run.**

**** "agricultural holding" has the meaning given by reference to the definition of "agricultural tenant" in section 65(8) of the Act.**

NOTE: You should sign Certificate B, C or D, as appropriate, if you are the sole owner of the land or building to which the application relates but the land is, or is part of, an agricultural holding.

Person Role

◯ The Applicant
⊘ The Agent

Title

First Name

Mark

Surname

Godson

Declaration Date

29/06/2022

☑ Declaration made

Declaration

I / We hereby apply for Full planning permission as described in this form and accompanying plans/drawings and additional information. I / We confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine options of the persons giving them. I / We also accept that: Once submitted, this information will be transmitted to the Local Planning Authority and, once validated by them, be made available as part of a public register and on the authority's website; our system will automatically generate and send you emails in regard to the submission of this application.

☑ I / We agree to the outlined declaration

Signed

Simon Firkins

Date

30/06/2022

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NOTES

REVISIONS

REV: DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Site Location Plan

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE 1:1250@A3

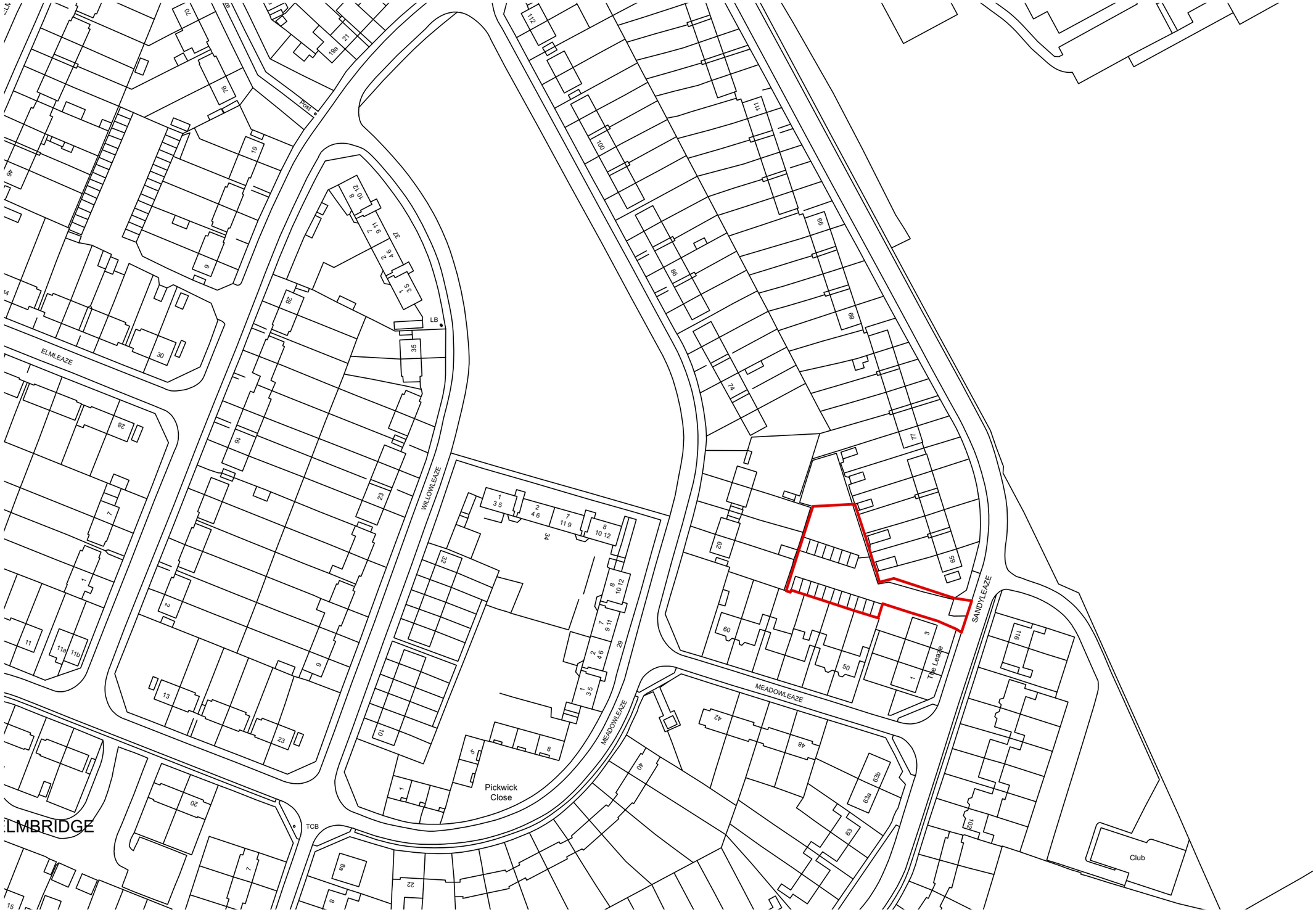
DATE Mar 2022

Quattro designarchitects

DRAWING NO. **REV**

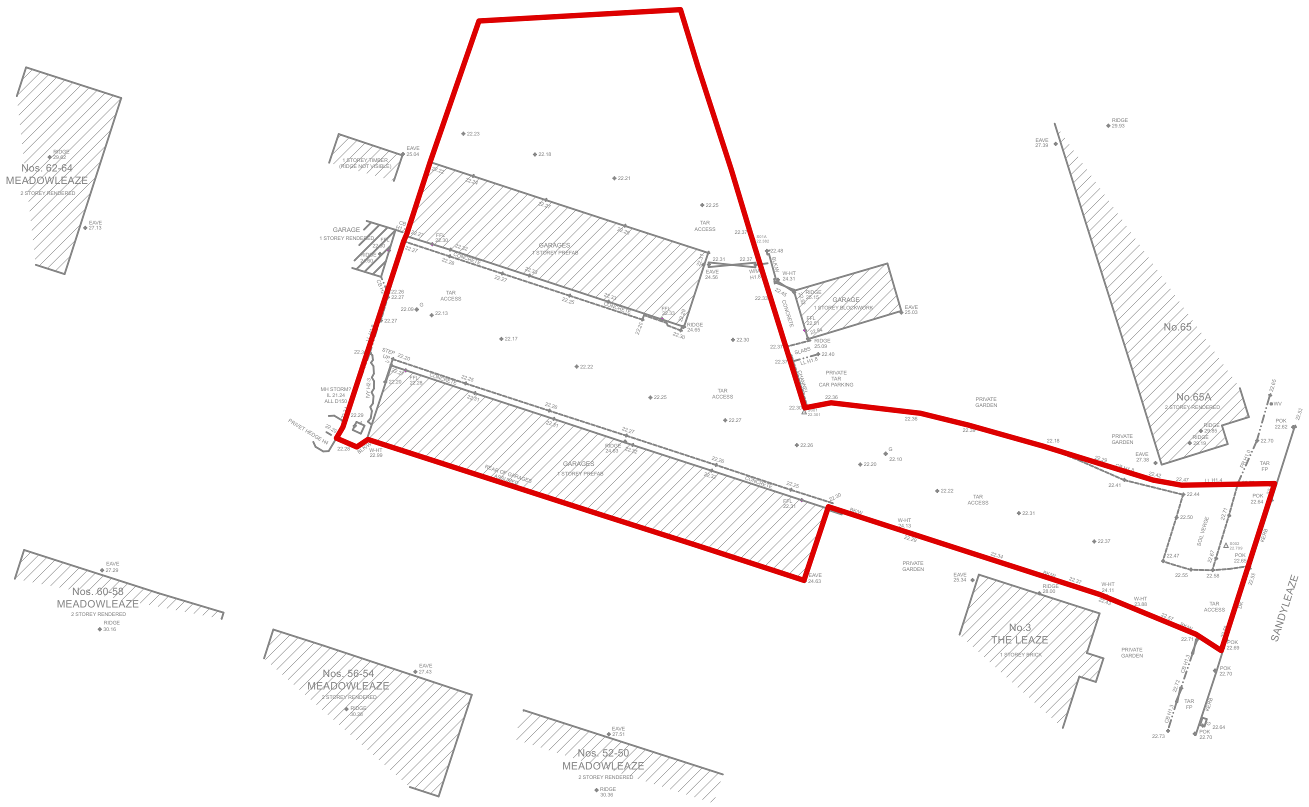
6614-P-01 **-**

Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY [redacted]



Key

Site boundary



N

0 5 20
2 10 50m

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NOTES

This drawing is the copyright of Quattro Design Architects Ltd and should not be reproduced in whole or in part without written permission. Only figured dimensions to be used for construction. Check all dimensions on site. Any discrepancies are to be reported to the Architect as soon as possible.

REVISIONS
REV: DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Existing Site Layout

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE 1:500@A3

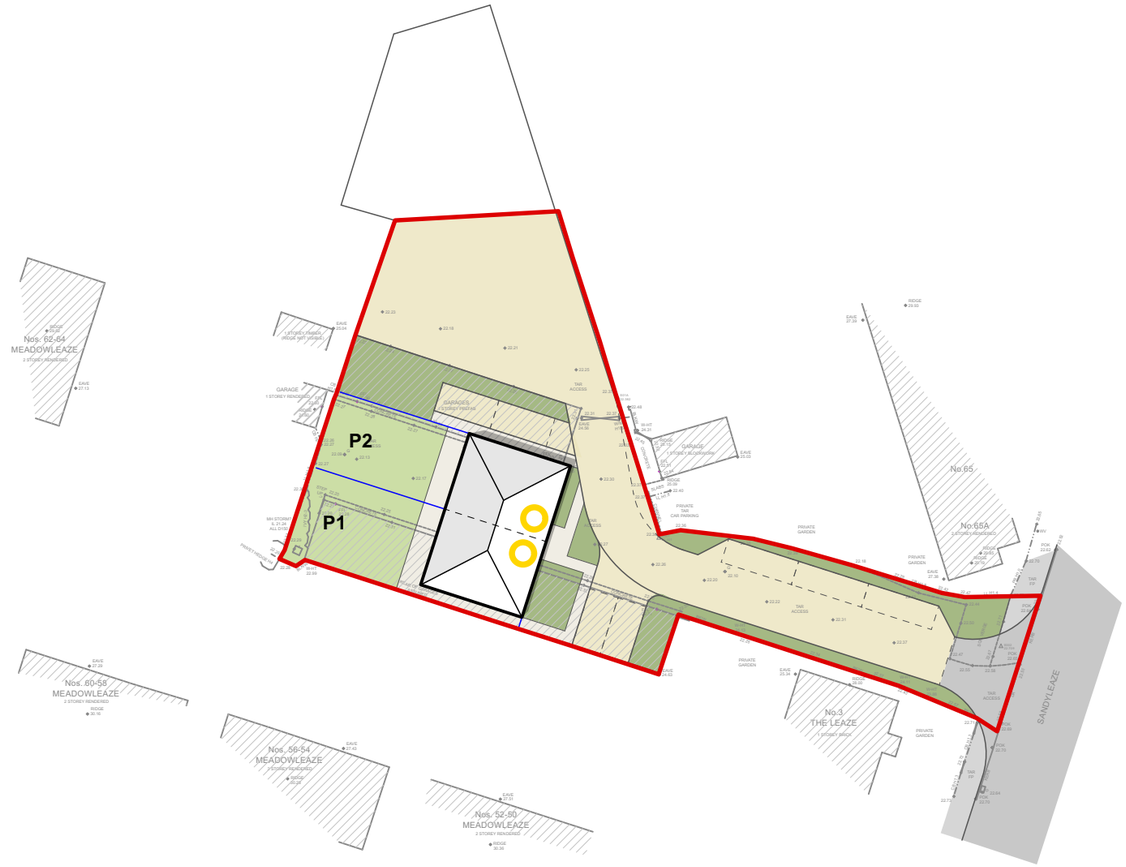
DATE Mar 2022

Quattro designarchitects

DRAWING NO. **REV**

6614-P-05 **-**

Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY [redacted]



Key

- Site boundary
- Road
- Footpath
- Paving
- Access Road
- Parking space
- Planted areas
- Private gardens
- Proposed trees
- Close board timber fencing

Schedule of accommodation

2no 1Bed 2Person
Bungalows @ 50sqm

Total: 2no Units

N

0 5 20
2 10 50m

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NOTES

REVISIONS

REV. DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Proposed Site Layout

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE 1:500@A3

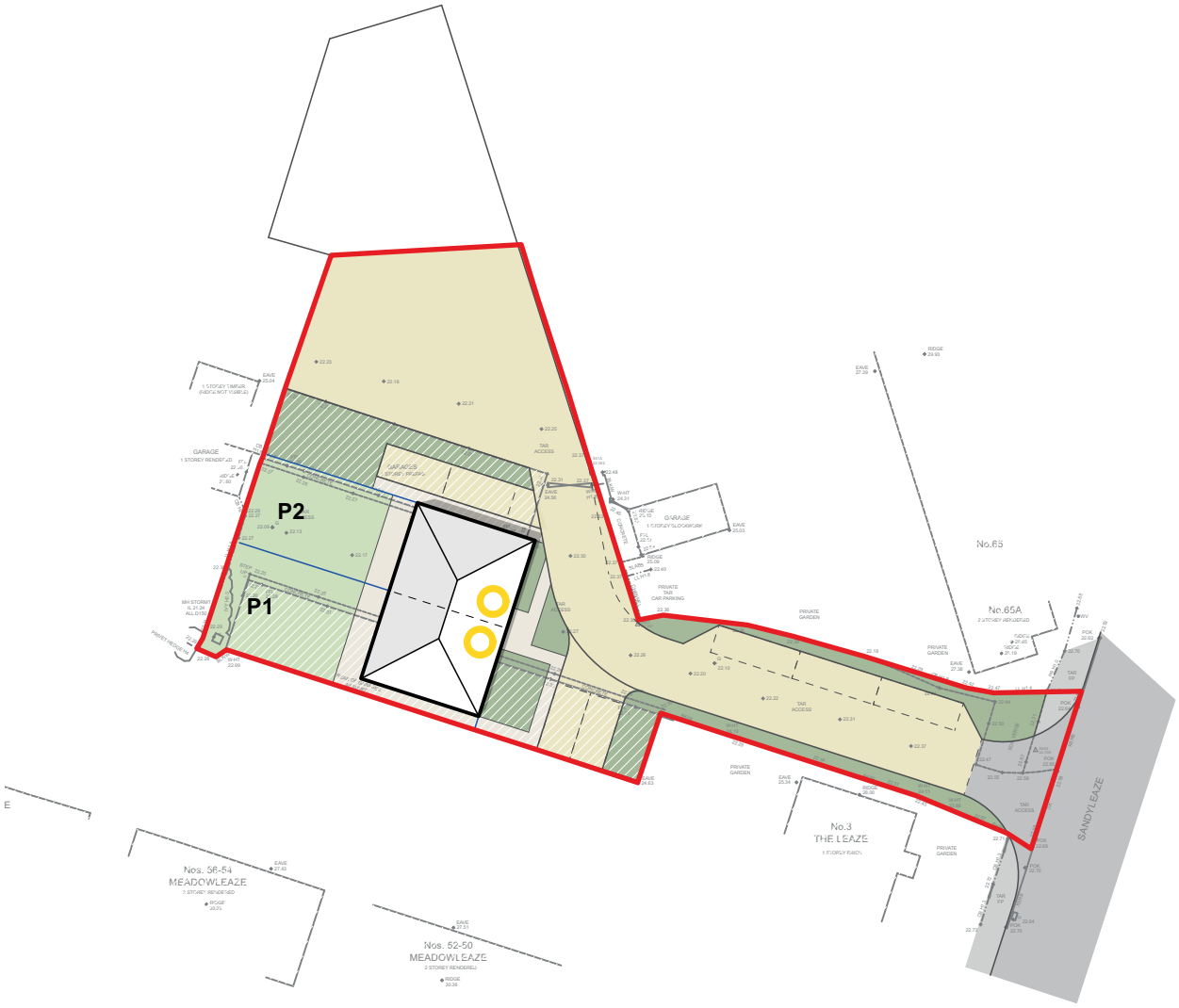
DATE Mar 2022

Quattro designarchitects

DRAWING NO. **REV**

6614-P-100 **-**

Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY [redacted]



Design & Access Statement

Sandyleaze,
Longlevens

Quattro
design architects

Reference:
6614-P-4000

Revision:
-

Author:
[redacted]

Date of Creation:
March 2022

Quattro
design architects

Contents

01 Introduction

Quattro Design Architects have been appointed by Gloucester City Homes to design a residential development on Sandyleaze, Longlevens. This scheme will provide additional affordable housing to help with the areas housing need.

The scheme represents an opportunity to enhance the built environment of the area whilst aiding continual growth, in line with the aspirations of the National Planning Policy Framework (NPPF).

1.1 Project Team

The project team is comprised of the following parties:

- Quattro Design Architects Ltd
- Gloucester City Homes
- SF Planning

In addition to the project team, detailed site assessments and surveys have been completed by the following parties:

- AD Horner (surveying consultant)
- Cotswold Transport Planning (transport consultant)
- Davidson Walsh (drainage consultant)

02 Site Location

2.1 Site Location & Description

The site is located approximately 3.2km east of Gloucester town centre, on Sandyleaze, Longlevens. The surrounding area contains a mix of uses but comprises primarily residential properties.

In total, the site is approximately 1050sqm and currently accommodates 18 no. single garages of concrete construction over two blocks. The site is bordered on all boundaries by the rear gardens of properties on Sandyleaze and Meadowleaze.

Vehicular and pedestrian access to the site is located off Sandyleaze to the east. The site currently provides vehicular access to the existing garages on site and those within the neighbouring rear gardens.

Site Location Plan

Quattro
design architects

03 Site Constraints

In this section we will identify key characteristics and provide an understanding of the site's context and constraints.

3.1 Site Constraints

The main site constraints have been assessed as follows:

- Overlooking and overbearing: Use appropriate window locations and types and suitable boundary treatments. Consideration of the site layout is also required. Care to be taken over overbearing and loss of views from existing properties.
- Access: Existing vehicular and pedestrian access to the neighbouring properties must be maintained.

04 Proposed Scheme

The layout of the scheme has arisen through the combination of the site constraints described in section 3.1 and our established principles for development. These principles include the following:

- Reaction to the site's location.
- Formation of public defensible frontage, 'a sense of place'.
- Arrangement between public and private space.
- Interaction and reinforcement of the scheme with the existing built form and townscape.
- Appropriate scale of building within this environment.
- Movement of people both vehicular and pedestrian relating to the site.

4.1 Amount / Scale

New properties on site are single storey bungalows. A breakdown of the accommodation is listed below:

2no. 1B2P Bungalows @ 50sqm

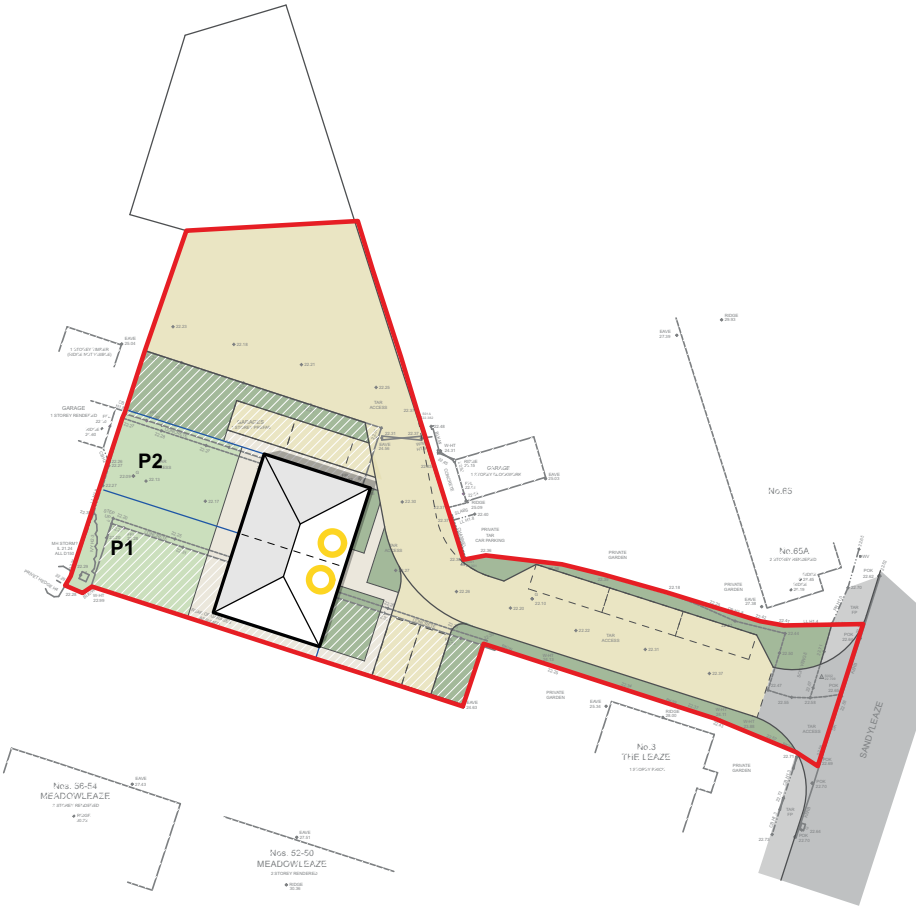
2no. total units

4.2 Layout

The layout of the scheme has arisen through the combination of the site constraints and our established principles for development.

There are 4 no. parking spaces proposed for the 2 dwellings.

The vehicular entrance to the site is located on Sandyleaze to the east.



Proposed Site Plan.

Quattro
design architects

4.4 Appearance

As designers, it is not our intention to copy the appearance of the local surroundings, but to borrow from it and enhance the positive aspects using the following palette of materials:

Walls	Cream/Off-White through colour Render (Exact Product TBC) Red Facing Brick (Exact Product TBC) Engineering Brick (Exact Product TBC)
Windows	uPVC - Grey
Roof	Concrete Tile - Grey
Doors	Secured By Design Doorsets

The following image shows elevations of the scheme, indicating how the materials will interact.

Plot 1
Front Elevation

Plot 2

Plot 2
Rear Elevation

Plot 1

05 Access

5.1 Vehicular Access

The vehicular entrance to the site is located on Sandyleaze, along the site's eastern boundary. The existing road provides access to new in curtilage parking serving the new properties.

5.2 Pedestrian Access

Pedestrian access to the site is provided via the existing access road.

06 Waste Minimisation

The following information sets out the approach to waste management that will be applied to the design, construction and occupation of the proposed development.

We have looked to cover as far as possible the construction and occupation waste issues and the preventative measures that have will be put in place to reduce the amount of waste produced.

The following list specifies the expected sources of waste from the construction process:

Building materials from the demolition of the existing buildings on site.
Soils from site clearance works.
Organic waste from site clearance works.
Wastage of construction materials during build phase (aggregate, brick, tiles, timber, metal, paint, various types of plastics, etc).
Cardboard (from packaging).

The following list specifies the expected sources of waste from the construction process:

Steel and aluminium containers.
Paper, newspapers and magazines.
Plastic bottles.
Cardboard.
Glass.
Textiles.
Organic waste.
Non-recyclable items.

Site Clearance, Site Preparation and Excavations.

There are anticipated wastes associated with the site preparation and site clearance. It is the intention that the enabling works will minimise the removal of existing hedgerows however, a requirement to remove a certain amount of material will still remain. It is therefore proposed that any green waste generated for the enabling works will be shredded on-site and spread around the base of retained hedgerows or stored on site to be spread around the base of new plants and trees.

High quality topsoil will be separated during excavation works and stored within the site. This can then be re-used on site where appropriate (gardens, planting areas, highway verges etc).

Where possible the amount of excavated material will be kept to a minimum and will be re-used on site to re-grade any required areas. For excavated material not being used on the site, the contractor will look to re-use it on any other available nearby site currently under construction.

The proposed access road has been designed to follow existing ground levels as much as possible. This will ensure that the new access road will not require extensive excavation.

Construction.

The ground floor to the building shall be constructed using pre cast concrete beams and blocks. All timber used within the scheme will be sourced from suppliers registered with FSC.

Where possible, we will look to use pre-fabricated units and standardised components. These factory made items tend to generate less waste and by using standard product sizes, this also helps to reduce off-cut wastage. All non-standardised items and materials used in the construction will be accurately ordered, thus reducing potential waste occurring from over ordering.

All site operatives will be made aware of the segregated skip system that will be put in place to keep waste materials apart prior to being taken to a registered waste disposal company.

It is proposed that the main contractor will utilise a colour coding system for waste materials. This system will dictate and identify which types of waste go into which container. The colour coding are standardised by the Institution of Civil Engineers for use throughout the construction industry.

During the construction process there will a commitment made by the principal contractor that a minimum of 10% of the materials used in the construction will be comprised of recycled content. Sustainably sourced materials will be used where possible and appropriate.

Preference should be given to suppliers of materials who will collect unused materials and packaging for re-use and recycling.

Any materials that are delivered to site will be carefully stored in a secure materials compound, with special consideration given to any hazardous materials and waste – although wherever possible materials that do not have hazardous content will be specified. Suitable Method Statements will be completed by the contractor for all potentially dangerous products and materials.
Items will be stored in a sensible manner so that materials are easily accessible in the correct order. This will reduce the potential for breakages and will therefore in turn, reduce waste materials.

Site Occupation.

All waste disposal and recycling facilities will be agreed with the local planning authority. In accordance with the services already provided by Gloucester City Council.

The proposal will allow for the suitable storage of all the required containers within their boundary. In addition to this, each property will be provided with a compost bin.

As a design ethos, we consider a ‘fabric first’ approach to be the most appropriate response to carbon reduction, rather than using renewable technologies. This means that there is physically less carbon used, rather than the same amount of carbon usage but coming from a more sustainable source. We see this as a more efficient and future-proof system to ensure continued low carbon usage.

Transportation of Waste.

Registered carriers will be used for the transportation of all construction waste, in line with ‘Duty of Care’ requirements. All waste will be taken to appropriately licensed sites.

Appropriate waste transfer documentation will be required to be completed by those delivering the waste, and the Site Manager will keep a detailed account of all aspects of disposal, including a register of carriers, disposal sites and relevant licensing details.

The Council will collect domestic waste. Sufficient space has been provided for all properties to manoeuvre all bins directly from their rear garden to their own bin collection point. Access into the site has been provided for bin lorries, and a relevant turning circle has been designed into the scheme, in compliance with Manual for Streets.

The proposal set out by this Waste Minimisation Statement can be said to be in accordance with the governing criteria in practice within the area. The site will provide a sustainable ethos that promotes waste minimisation, waste re-use and recycling throughout the lifespan of the development.

Drainage & Maintenance Strategy
For

Sandyleaze
Longlevens
Gloucester

Project Ref: 22032

April 2022

davidsonwalsh
37 Prestbury Road | Cheltenham | GL52 2PT
[redacted] | Registered in England No.05711218

Contents

1 Introduction

This document has been prepared to summarise the design considerations that have been made as part of the detailed design of the proposed development in order to provide supporting information to the planning application.

2 Proposed Development

The proposed development is to comprise the construction of two new dwellings on the site of the existing hardstanding. The site has a total plan area of 1021m², but the drainage strategy has included an additional area of the car park that doesn't lie within the site boundary but does use the same drainage system. This increases the site area by 205m^2, leading to the overall area considered for the drainage strategy to 1226m^2.

3 Drainage

3.1 Flooding

The flood maps available from the Environment Agency[1] indicate that the site lies outside the areas which are affected by flooding from Seas and Rivers. When considering flooding because of surface water runoff, there does not to be any substantial risk of flooding to the site. Low areas of Sandyleaze Road appear to have a low risk of flooding. It appears there is some minor pooling of flood water at the lower end of the car park that lies outside of the site boundary, this could be due to impermeable surface and the lack of appropriate drainage. This pooling is very low risk.

3.2 Existing Drainage Arrangement

The existing site consists of hardstanding, previously used as garages for the surrounding houses. There is a formal drainage regime comprising surface being taken to the existing surface water system gully's, but it is believed that there is no flow control device.

3.3 Proposed Drainage Strategy for the control of surface water runoff[2]

From the British Geological survey maps and knowledge of the area, the ground is likely to comprise made ground overlying heavy clays which will not allow sufficient percolation to allow natural filtration methods to be adopted. Therefore, it is considered that soakaways are not suitable and that an attenuation system is considered to be the most appropriate drainage solution. Flow from the buildings and landscaping will be diverted into an attenuation tank below the access road which will provide all the storage for the storm durations considered. Flows off the site will then be controlled via a flow control chamber set at a flow rate offering a 40% improvement on the existing 1:100, 6 hour event flow rate.

[1] See Annex A – Flood Maps

[2] See Annex B – Drainage Strategy Plan

3.4 Contamination Control

For the draining of the roof and hard landscaping, all water falling on hardstandings flows into the granular storage surrounding the tank allowing initial silt deposits and contaminants to be caught in the stone before entering the system. The level of hydrocarbon contamination associated with a site of this nature is minimal. Therefore, the stone attenuation system has been specified allowing hydrocarbons to be captured at the earliest opportunity.

4 Rainfall Assessment

4.1 Rainfall

Detailed calculations for rainfall estimation have been completed using the UK Centre for Ecology and Hydrology flood estimation Handbook web service FEH 2013[3] for surface water storage to assess the viability of using attenuation on the site.

From the data output, based on a 40% improvement to the existing 1 in 100 year 6 hour event with a 2.35l/s flow from the site, the estimated storage volumes are as follows.

4.2 Site Impermeable areas and Storage

4.2.1 Areas used in calculations

The storage on the site has been assessed and equates to the following:-

Total site area	=	1020m²
Impermeable Areas		
Roof	=	118m²
Footpaths & Road (New & Existing)	=	596m²
Car Park area outside of site boundary	=	205m²
Total impermeable area	=	919m²
Storage volume Required 1:100 6hr +40%	=	38.08m³
Maximum storage from other events	**=**	**51.40m³**

[3] See Annex C – QBar, Rainfall Estimation & Attenuation

4.2.2 Storage Provisions

The storage on the site has been assessed and equates to the following:-

Court yard & Footpath

Cumulative Total

Storage Tank

Plan Area	=	138.6m²
Storage Depth	=	0.40m
Void ratio	=	0.95
Stone Subbase storage	=	52.67m³

52.67m³

Therefore the storage proposed has sufficient capacity.

4.3 Exceedance Events

Exceedance events associated with failure of the system would incorporate the water flowing down exceedance gullies. One of the gully's will enter the tank directly and not pass through the stone medium, the second gully will bypass the flow control system and enter the surface water system directly, this has been put in place in case the hydrobrake fails and will prevent the neighbouring houses from flooding.

5 Maintenance Strategy

The maintenance of the drainage system will be the responsibility of the freeholder following the schedule presented below.

1	Attenuation Storage	Frequency
Routine Maintenance		
1.1	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then annually.
1.2	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
1.3	Remove sediment form pre-treatment structures	Annually
Remedial Actions		
1.4	Repair/rehabilitate inlets, outlets, overflows and vents.	As required
Monitoring		
1.5	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	Annually
1.6	Survey inside of tank for sediment build-up and remove if necessary.	Every 5 years

2	Flow Control	
Routine Maintenance		
2.1	Check water can flow freely	Monthly/as required
2.2	Remove any debris/litter	Monthly/as required
Occasional Maintenance		
2.3	Remove Sediment	6 months
2.4	Repair as a result of damage	As required
Monitoring		
2.5	General Inspection	6 Months

3	Inspection Chambers	
Routine Maintenance		
3.1	General Inspection	Quarterly
3.2	Check water can flow freely	Monthly/as required
3.3	Remove any debris/litter	Monthly/as required
Occasional Maintenance		
3.4	Remove Sediment	6 months
Remedial Maintenance		
3.5	Repair as a result of damage	As Required

4	Drain Pipes	
Routine Maintenance		
4.1	Check water can flow freely	6 months
Occasional Maintenance		
4.2	Repair as a result of damage highlighted in CCTV report	As Required
Monitoring		
4.3	CCTV survey to confirm pipe is in good working order	Every 5 years

5	Exit Point to Manhole	
Routine Maintenance		
5.1	Check water can flow freely from pipe	6 months
5.2	Remove debris & litter	6 months
Occasional Maintenance		
5.3	Repair as a result of damage	As Required
Monitoring		
5.4	Remove covers and survey manhole condition	Every 5 years

Drainage & Maintenance Strategy
For

Sandyleaze
Longlevens
Gloucester

Project Ref: 22032

Annex A – Flood Maps

davidsonwalsh
37 Prestbury Road | Cheltenham | GL52 2PT
[redacted] Registered in England No.05711218

Figure 1:- Surface Water Flooding

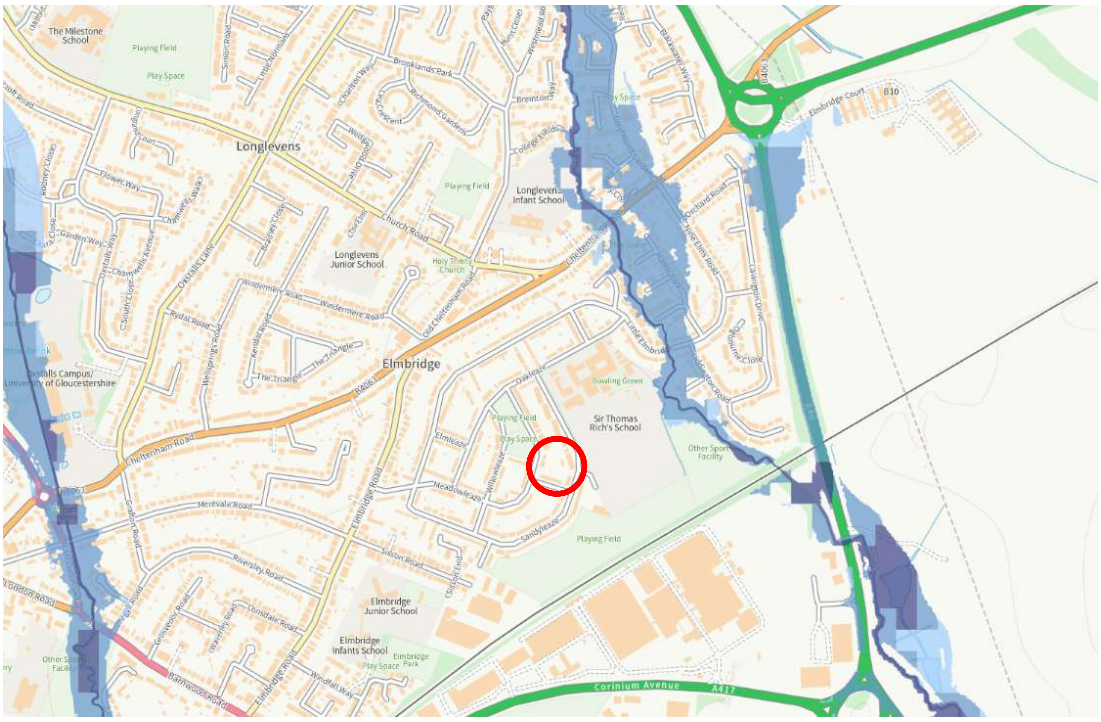


Figure 2:- Flooding From Seas & Rivers

Drainage & Maintenance Strategy
For

Sandyleaze
Longlevens
Gloucester

Project Ref: 22032

Annex B – Drainage Strategy Plan

davidsonwalsh
37 Prestbury Road | Cheltenham | GL52 2PT
[redacted] | Registered in England No.05711218

KEY

- PRIVATE SURFACE WATER SN6 (100Ø @ MIN 1:100 U.N.O.)
- PRIVATE FOUL WATER SN6 (100Ø @ MIN 1:80 U.N.O.)
- CONCRETE PROTECTION SLAB
- R.E — RODDING EYE
- G — ROAD GULLEY
- EXCEEDANCE ARROW

REV	DESCRIPTION	BY	DATE
		CHKD	DATE

DESIGNERS CDM NOTES

ALL WORKS TO BE CARRIED OUT BY A COMPETENT CONTRACTOR, WORKING TO AN APPROVED SAFE SYSTEM OF WORK, INCLUDING A DETAILED RAMS DOCUMENT

RESIDUAL RISK REGISTER

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING:

DESCRIPTION	IDENTIFIED RISK / HAZARD

davidsonwalsh

37 Prestbury Road | Cheltenham | Gloucestershire | GL52 2PT

[redacted]

www.davidsonwalsh.com

Client: GLOUCESTER CITY HOMES

Project: SANDYLEAZE GLOUCESTER

Drawing: DRAINAGE & EXTERNAL WORKS

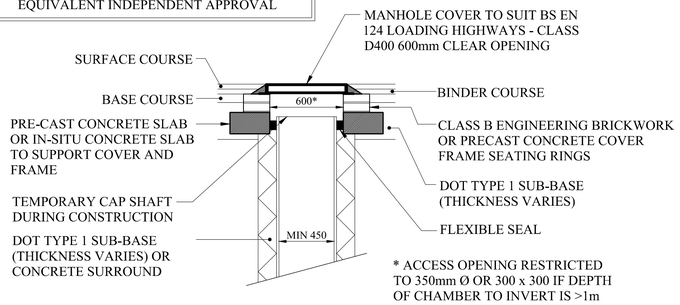
Status: PRELIMINARY

Scale	1:100 UNO	Leaf	A1
Drawn	TS	Date	27.04.22
Checked		Date	

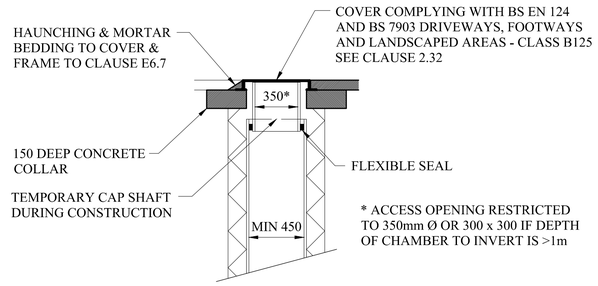
Project No. 22032

Drawing No. 101 Revision

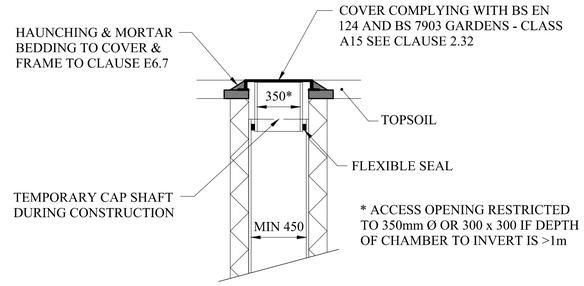
PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL



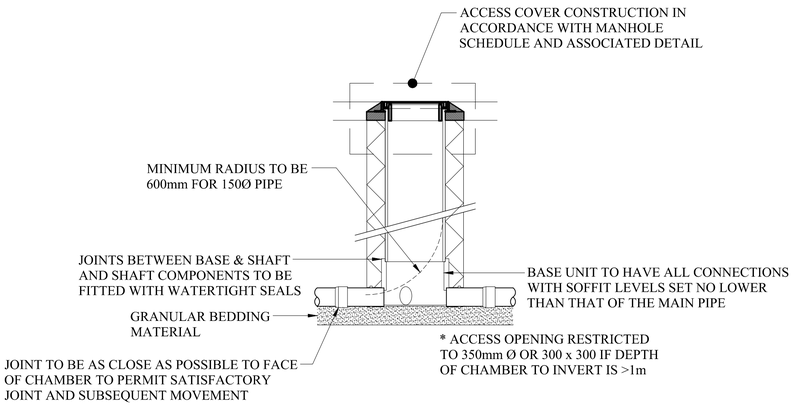
MANHOLE COVER DETAIL
SITED IN ROADS/HIGHWAYS
(CLASS D400)
(1:25)



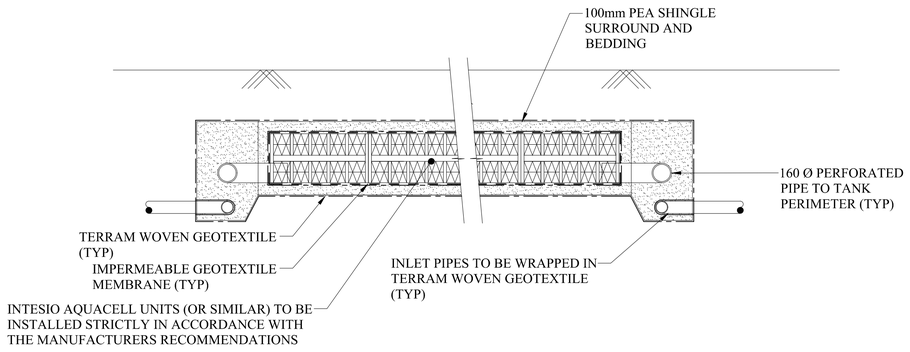
MANHOLE COVER DETAIL
SITED IN DRIVEWAYS/FOOTWAYS
(CLASS B125)
(1:25)



MANHOLE COVER DETAIL
SITED IN DOMESTIC GARDENS
(CLASS A15)
(1:25)



TYPE 4 - TYPICAL POLYPROPYLENE INSPECTION CHAMBER
(IN ACCORDANCE WITH SEWERS FOR ADOPTION 7)
(1:25)

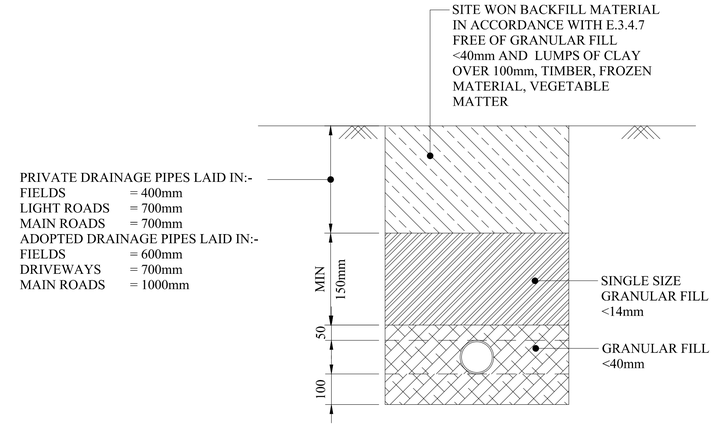


TYPICAL SECTION THROUGH ATTENUATION TANK

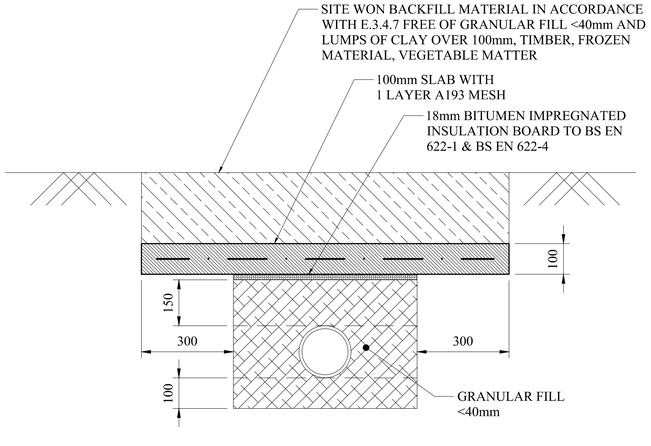
PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL

FORMATION TO ACHIEVE MINIMUM CBR 2%

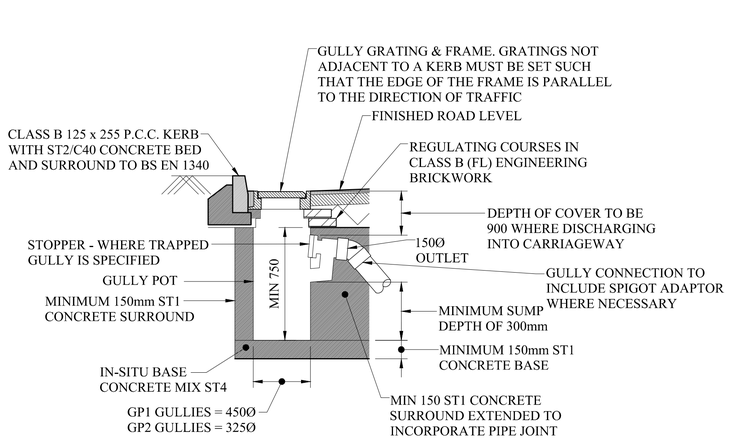
ALL SURFACING MATERIALS ARE TO BE IN ACCORDANCE WITH GLOUCESTERSHIRE TECHNICAL SPECIFICATION FOR NEW STREETS



CLASS 'S' PIPE BEDDING & SURROUND 100Ø PIPE
(1:10)



CONCRETE SLAB PROTECTION DETAIL
150Ø PIPES ≤ 900mm COVER
(1:10)



TYPICAL ROAD GULLY DETAIL
(1:25)

REV	DESCRIPTION	BY	DATE
		CHKD	DATE

DESIGNERS CDM NOTES

ALL WORKS TO BE CARRIED OUT BY A COMPETENT CONTRACTOR, WORKING TO AN APPROVED SAFE SYSTEM OF WORK, INCLUDING A DETAILED RAMS DOCUMENT

RESIDUAL RISK REGISTER

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING:

DESCRIPTION	IDENTIFIED RISK / HAZARD

davidsonwalsh
37 Prestbury Road | Cheltenham | Gloucestershire | GL52 2PT
[redacted]
www.davidsonwalsh.com

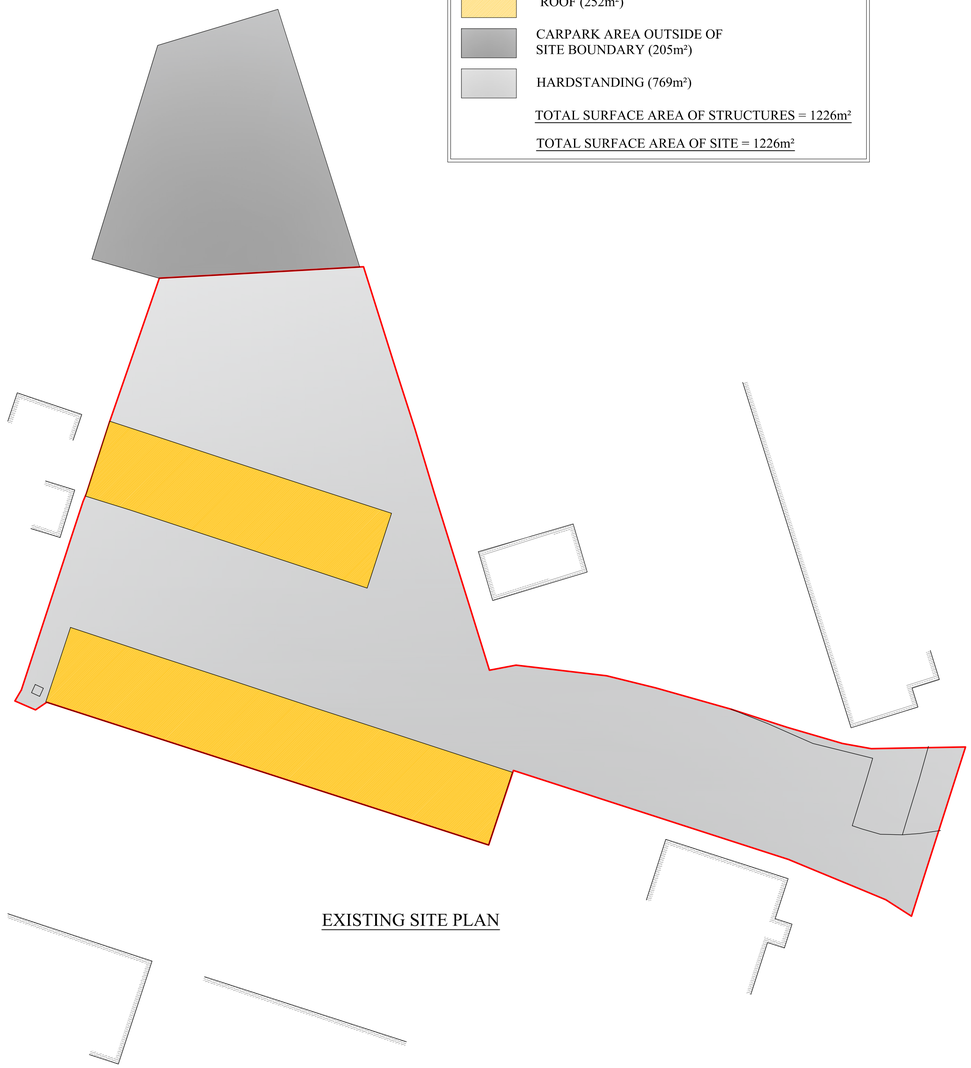
Client	GLOUCESTER CITY HOMES
Project	SANDYLEAZE GLOUCESTER
Drawing	DRAINAGE DETAILS
Status	PRELIMINARY
Scale	1:25 UNO
Leaf	A1
Drawn	TS
Date	27.04.22
Checked	
Date	
Project No.	22032
Drawing No.	102
Revision	

STRUCTURES AREA KEY:

- ROOF (252m²)
- CARPARK AREA OUTSIDE OF SITE BOUNDARY (205m²)
- HARDSTANDING (769m²)

TOTAL SURFACE AREA OF STRUCTURES = 1226m²

TOTAL SURFACE AREA OF SITE = 1226m²



EXISTING SITE PLAN

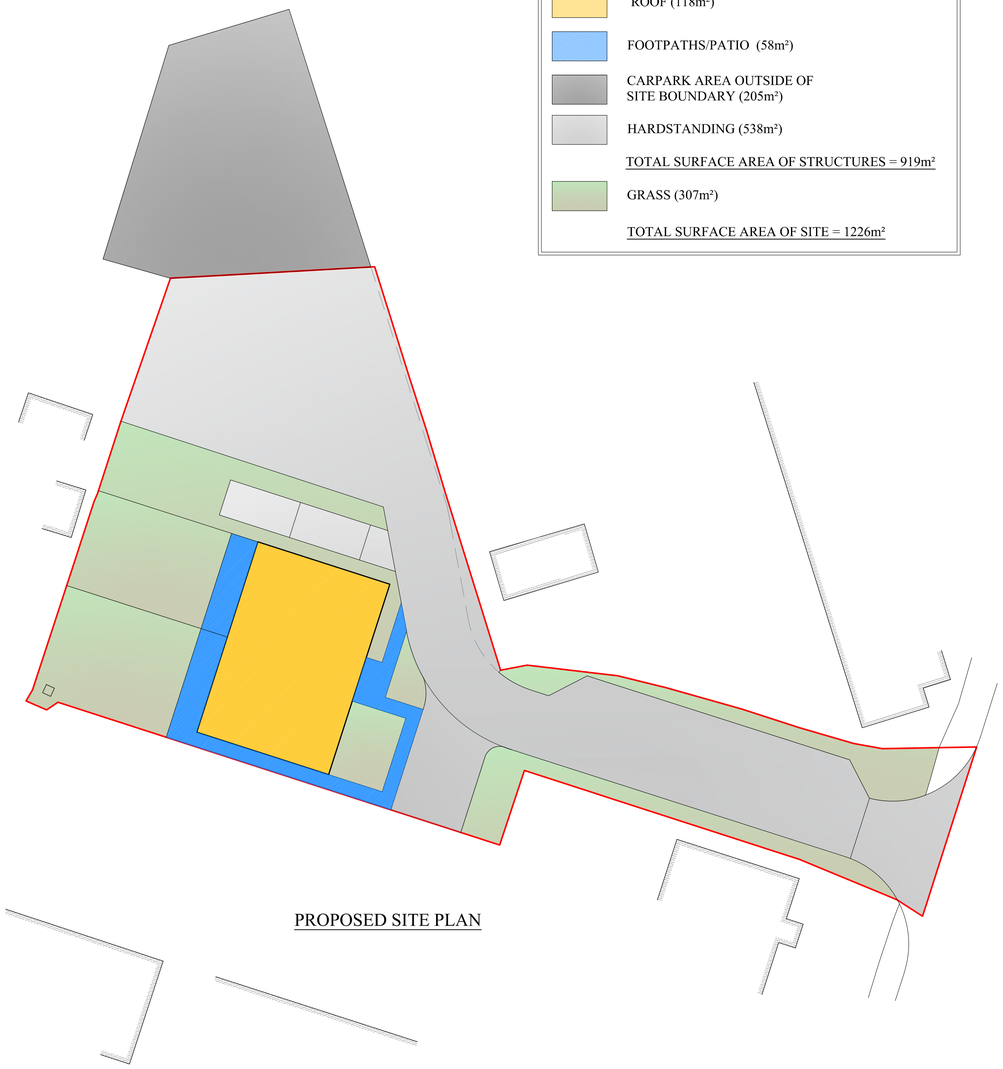
STRUCTURES AREA KEY:

- ROOF (118m²)
- FOOTPATHS/PATIO (58m²)
- CARPARK AREA OUTSIDE OF SITE BOUNDARY (205m²)
- HARDSTANDING (538m²)

TOTAL SURFACE AREA OF STRUCTURES = 919m²

- GRASS (307m²)

TOTAL SURFACE AREA OF SITE = 1226m²



PROPOSED SITE PLAN

REV	DESCRIPTION	BY / CHKD	DATE / DATE

DESIGNERS CDM NOTES

ALL WORKS TO BE CARRIED OUT BY A COMPETENT CONTRACTOR, WORKING TO AN APPROVED SAFE SYSTEM OF WORK, INCLUDING A DETAILED RAMS DOCUMENT

RESIDUAL RISK REGISTER

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING:

DESCRIPTION	IDENTIFIED RISK / HAZARD

davidsonwalsh

37 Prestbury Road | Cheltenham | Gloucestershire | GL52 2PT

[redacted]

www.davidsonwalsh.com

Client: GLOUCESTER CITY HOMES

Project: SANDYLEAZE GLOUCESTER

Drawing: DRAINAGE AREAS

Status: PRELIMINARY

Scale	1:200 UNO	Leaf	A1
Drawn	TS	Date	27.04.22
Checked		Date	

Project No. 22032

Drawing No. 201 Revision

Drainage & Maintenance Strategy
For

Sandyleaze
Longlevens
Gloucester

Project Ref: 22032

Annex C – QBar, Rainfall Estimation & Attenuation

davidsonwalsh
37 Prestbury Road | Cheltenham | GL52 2PT
[redacted] | Registered in England No.05711218

Existing Site Flows

Summary of FEH 2013 Calculations

Duration hours	2 year rainfall (mm)	30 year rainfall (mm)	100 year rainfall (mm)	200 year rainfall (mm)	500 year rainfall (mm)	1000 year rainfall (mm)
0.25	7.2	18.85	25.52	30.35	37.73	43.79
0.5	9.37	25.06	34.23	41.02	51.38	59.86
1	11.86	31.91	44.07	52.93	66.68	78.09
2	15.86	38.76	53.08	63.21	78.12	90.06
3	18.43	43.27	58.84	69.54	84.92	97.09
4	20.36	46.67	63.07	74.09	89.71	102.01
6	23.24	51.64	69.05	80.42	96.28	108.69
24	34.37	69.87	89.27	101.29	117.62	130.18

Total Site Area	=	0.1226	**ha**
Existing Hardstanding	=	0.0974	**ha**
Exisitng Roof	=	0.0252	
Total Impermeable area considered	=	**0.1226**	**ha**

2 year event

Storm Event	Rain	Intensity	Maximum surface runoff
(min)	(mm)	(mm/h)	(l/s)
15.00	7.20	28.80	1.46
30.00	9.37	18.74	0.95
60.00	11.86	11.86	0.60
120.00	15.86	7.93	0.40
180.00	18.43	6.14	0.31
240.00	20.36	5.09	0.26
360.00	23.24	3.87	0.20
1440.00	34.37	1.43	0.07

30 year event

Storm Event	Rain	Intensity	Maximum surface runoff
(min)	(mm)	(mm/h)	(l/s)
15	18.85	75.40	25.70
30	25.06	50.12	17.08
60	31.91	31.91	10.88
120	38.76	19.38	6.61
180	43.27	14.42	4.92
240	46.67	11.67	3.98
360	51.64	8.61	2.93
1440	69.87	2.91	0.15

100 year event

Storm Event	Rain	Intensity	Maximum surface runoff	
(min)	(mm)	(mm/h)	(l/s)	
15	25.52	102.08	34.79	
30	34.23	68.46	23.33	
60	44.07	44.07	15.02	
120	53.08	26.54	9.05	
180	58.84	19.61	6.68	
240	63.07	15.77	5.37	
360	69.05	11.51	3.92	40% imp.t reqd
1440	89.27	3.72	0.19	

100 year event + 40%

Storm Event	Rain	Intensity	Maximum surface runoff
(min)	(mm)	(mm/h)	(l/s)
15	35.73	142.91	48.71
30	47.92	95.84	32.67
60	61.70	61.70	21.03
120	74.31	37.16	12.66
180	82.38	27.46	9.36
240	88.30	22.07	7.52
360	96.67	16.11	5.49
1440	124.98	5.21	0.26

Proposed Site Storage

Summary of FEH 2013 Calculations

Duration hours	2 year rainfall (mm)	30 year rainfall (mm)	100 year rainfall (mm)	200 year rainfall (mm)	500 year rainfall (mm)	1000 year rainfall (mm)
0.25	7.2	18.85	25.52	30.35	37.73	43.79
0.5	9.37	25.06	34.23	41.02	51.38	59.86
1	11.86	31.91	44.07	52.93	66.68	78.09
2	15.86	38.76	53.08	63.21	78.12	90.06
3	18.43	43.27	58.84	69.54	84.92	97.09
4	20.36	46.67	63.07	74.09	89.71	102.01
6	23.24	51.64	69.05	80.42	96.28	108.69
24	34.37	69.87	89.27	101.29	117.62	130.18

Total Site Area	=	0.1226	ha
Landscaping (Permeable)	=	307	m²
Hard Landscaping	=	538	m²
Roof	=	118	m²
Footpaths	=	58	m²
Car Park area ouside of site boundary	=	205	m²
Total Impermeable Area	=	**919**	**m²**
Total Impermeable area	=	**0.0919**	**ha**
Flow Rate for 1:100 6 hour event	=	**3.92**	**l/s**
40% improvement on flow rate	=	**2.35**	**l/s**

2 year event

Storm Event	Rain	Intensity	Maximum surface runoff	Throttle Rate	Total Storage
(min)	(mm)	(mm/h)	(l/s)	(l/s)	(m³)
15.00	7.20	28.80	7.36	2.35	4.50
30.00	9.37	18.74	4.79	2.35	4.38
60.00	11.86	11.86	3.03	2.35	2.44
120.00	15.86	7.93	2.03	2.35	-2.36
180.00	18.43	6.14	1.57	2.35	-8.47
240.00	20.36	5.09	1.30	2.35	-15.16
360.00	23.24	3.87	0.99	2.35	-29.46
1440.00	34.37	1.43	0.37	2.35	-171.72

30 year event

Storm Event	Rain	Intensity	Maximum surface runoff	Throttle Rate	Storage
(min)	(mm)	(mm/h)	(l/s)	(l/s)	(m³)
15	18.85	75.40	19.26	2.35	15.22
30	25.06	50.12	12.80	2.35	18.81
60	31.91	31.91	8.15	2.35	20.88
120	38.76	19.38	4.95	2.35	18.70
180	43.27	14.42	3.68	2.35	14.38
240	46.67	11.67	2.98	2.35	9.03
360	51.64	8.61	2.20	2.35	-3.34
1440	69.87	2.91	0.74	2.35	-139.07

100 year event

Storm Event	Rain	Intensity	Greenfield Runoff Volume	Throttle Rate	Storage
(min)	(mm)	(mm/h)	(l/s)	(l/s)	(m^3)
15	25.52	102.08	26.08	2.35	21.35
30	34.23	68.46	17.49	2.35	27.25
60	44.07	44.07	11.26	2.35	32.06
120	53.08	26.54	6.78	2.35	31.87
180	58.84	19.61	5.01	2.35	28.70
240	63.07	15.77	4.03	2.35	24.12
360	69.05	11.51	2.94	2.35	12.67
1440	89.27	3.72	0.95	2.35	-121.23

100 year event + 40%

Storm Event	Rain	Intensity	Maximum surface runoff	Throttle Rate	Storage	
(min)	(mm)	(mm/h)	(l/s)	(l/s)	(m^3)	
15	35.73	142.91	36.51	2.35	30.74	
30	47.92	95.84	24.49	2.35	39.84	
60	61.70	61.70	15.76	2.35	48.27	
120	74.31	37.16	9.49	2.35	51.40	Design
180	82.38	27.46	7.02	2.35	50.35	
240	88.30	22.07	5.64	2.35	47.32	
360	96.67	16.11	4.12	2.35	38.08	
1440	124.98	5.21	1.33	2.35	-88.39	

Storage on site = **51.5 m^3**

Gloucester City Council
Planning Performance Agreement

Please use this form to set out the terms of your proposed Planning Performance Agreement with the Council

Between:	**Gloucester City Homes**
and:	**Gloucester City Council**

Planning reference(s):	21/01076/PREAPP
Site locations:	Sandyleaze Garage Site
Description of development(s):	Sandyleaze – redevelopment of 2x garage blocks for the construction of 2No. 1 bedroom bungalows and associated parking and public realm improvements.
Applicant team:	[redacted]
Council team:	**Richard Hawkey.** **Jon Bishop**

1 Main issues and stakeholder involvement
This PPA aims to secure collaborative working between the Applicant and Gloucester City Council for the development of these sites. The objectives of this PPA are to: • Agree a project plan including timescales, key milestones and meetings schedule. • Agree key issues to be resolved • Provide clarity in respect of response timescales; • Ensure all technical matters are resolved as far as possible

- To enable the applicant to agree timeframes with Homes England for starts on site and grant draw-downs
- To increase the amount of affordable housing delivered in the city
- Promote the collaboration between GCC and GCH to the wider public

2 General Common Principles

The partners commit to:

- Act with fairness and in good faith in respect of all matters related to the handling of the planning (and related) application(s) and will work jointly in complying with their respective obligations under this agreement.
- Address expeditiously any requests for clarification and/or further information.
- Undertake to meet and/or discuss matters by telephone or e-mail in a spirit of co-operation and where necessary seek early resolution of any areas of misunderstanding or dispute.
- To use their reasonable endeavours to adhere to the timetable for the project.
- To review and amend the timetable as necessary to take account of any relevant unforeseen matters that might arise

3 Key milestones

List here all the significant milestones to be achieved throughout this PPA, together with proposed completion date and lead responsible Team Member for this task

Milestone	Proposed achievement date	Responsible Team Member(s)	Week
Submission of planning application	1st July 2022	Applicant Team	0
Check application for validation (timetable to be reviewed if invalid)	Within 5 working days of receipt	Planning Officer	0
Application validated	8th July		
GCC to send consultations	11th July	Planning Officer	1
35 day consultation period – allow 28 days for press notice [Copies of consultee responses and representations to be sent to applicant team on receipt by LPA.]	Ends 2nd September	Planning Officer	1-6

Project review meeting. • Allocate actions. • Review timeline • Confirm if any applications will be required to go to committee. • Confirm if any S106 required.	w/c 5th September	Applicant Team and Planning Officer + consultees as required	7
Response/rebuttal to Consultee responses and any Reps.	w/c 12th September	Applicant Team	8
Submission of additional/revised plans & information	w/c 19th September	Applicant Team	9
All matters finalised (programme below based on minor amendments being required and no further consultation/publicity required for the application. Timetable below to be adjusted if consultation/publicity required)	23rd September	Planning Officer /Applicant Team	9
Drafting of application reports	23rd September – 7th October	TBC	10-11
<u>Committee Headlines (if required)</u>			
Committee report review	tbc	GCC	
Committee report published	Tbc	GCC	
Committee meeting	Tbc	TBC	
Issue of decision notice: • If decision follows office recommendation. • If alternative decision reached	Within 2 working days from committee To be discussed in light of outcome	GCC Planning Officer & GCC Team	

4 Services, fees and payment

The total fee payable by the applicant team to Gloucester City Council for providing Officer time for the advice within the terms of this PPA on the proposed development (excluding the statutory planning application fee) is agreed at £2,000 and is to be paid up front. This excludes any external consultancy fees, the applicant will pay the reasonable costs of any external consultants appointed by the Council to assist with the assessment of the proposal.

TOTAL including VAT	**£2,000**	

4 Signatures

The PPA is formally agreed between the parties. It will form the basis for the submission and determination of the planning application. All parties are committed to the principle of collaborative working, to using reasonable endeavours to undertake the necessary tasks as outlined in this document according to the timetable established unless otherwise agreed subsequently between the parties (but for the avoidance of doubt this agreement is not intended to be legally binding).

While a PPA will help ensure an application is processed to an agreed timetable, the agreement does not prejudice the outcome of a planning application nor does it guarantee a planning permission.

I hereby agree to the terms set out above:

For Gloucester City Council as Local Planning Authority

Name: Jon Bishop

Position: Planning Development Manager

Signature: [redacted]

Date: 28/08/2022

I hereby agree to the terms set out above:

For the applicant team -

Name: [redacted]

Position:

Signature:

Date: 28/06/2022

Freedom of information

Your enquiry, together with any response made by the Council, will be made available for public inspection unless you confirm in writing to us that the information provided is commercially sensitive. If the Local Planning Authority receives a request, under the Freedom of Information Act (FOI) or Environmental Information Regulations (EIR), to disclose information relating to the planning performance agreement they are obliged to do so unless the information is deemed exempt under the Act.

Note.

We can only withhold information under FOI or EIR if the information falls under one of the exemptions (FOI) or exceptions (EIR) set out in legislation. For certain pre-application issues the applicant would be advised to complete the commercially sensitive checklist that should set out the reasons why, and for how long, they feel any information relating to the case needs to remain confidential. However, whilst we will take account of these views, the final decision on whether the

information should be withheld rests with the Council. The Council maintains compliance to the Data Protection Act and we will not release any personal information to third parties.

If further services are required during the course of the agreement, a new agreement may need to be drafted and signed and sent to the Council with a completed notification form. This allows us to identify and process your documents urgently.

SFPLANNING

PLANNING STATEMENT

Redevelopment of land at Sandyleaze, Longlevens for the provision of 2no. bungalows with associated parking and landscaping – May 2022

On behalf of Gloucester City Homes

Contents

1.0 Introduction

BACKGROUND

1.1 This Planning Statement has been prepared by SF Planning Limited on behalf of Gloucester City Homes (GCH). Full planning permission is sought for the redevelopment of garages for 2no. bungalows with associated parking and landscaping on land at Sandyleaze, Longlevens, GL2 0PU. This statement should be read in conjunction with the submitted application and other supporting documentation, including the accompanying plans.

1.2 The application has been the subject of pre-application discussions with the Local Planning Authority (Ref. 21/01076/PREAPP, see Appendix A). This will be discussed in more detail below.

Aerial view of the application site

1.3 The site is located off Sandyleaze in Longlevens. Approximately 0.2 miles to the north is Sir Thomas Rich's School and Sport Centre, and to the southwest is Elmbridge Primary Lower School and Upper School which is approximately 0.7 miles away. Old Richians RFC also lies a stone's throw away in a southeasterly direction from the site. In addition, there are a good variety of shops,

supermarkets and leisure opportunities within walking distance of the site and good access to services in the wider City Centre.

1.4 The site is located near to the A417 and the A40, both national and primary links, and approximately 10 minutes to the M5 motorway, a national link. These highways and major roads provide links to Cheltenham, Cirencester, Tewkesbury, and further afield. The site is also near to the B4063 which is a major route into the city centre and the Elmbridge Court roundabout.

1.5 Due to the site's proximity to the centre of Gloucester, there are a number of bus stops located near to the site. The closest bus stop is for the No.6 bus service between Gloucester and Longlevens and is located on Elmleaze, approximately 0.4 miles away. Additional bus services are also available from Cheltenham Road (94 gold, 94U, 94X and N94) which provide access to the city centre and Cheltenham. Gloucester bus station is located approximately 2.5 miles (approx. 10 minutes by bus from the site) and provides frequent buses to Cheltenham, Tewkesbury and Bristol. Gloucester railway station is located approximately 2.4 miles (approx. 9 minutes by bus) from the site enabling journeys further than the Gloucestershire boundary.

1.6 The site is currently garages and hard standing. The land around the site comprises a variety of small to medium-sized semi-detached and terraced houses, as well as bungalows.

Dwellings on Sandyleaze either side of the access road

Garage structures within the application site

2.0 Planning history and the proposal

THE PROPOSAL

2.1 The application seeks full planning permission for the erection 2no. 1B2P bungalows with associated parking and landscaping. The proposal also includes a secure cycle storage (shed supplied), car parking and space for bin/recycling storage.

2.2 The proposals will be similar in scale and character to surrounding residential development, and will also fulfill a clear need for affordable housing in the locality and wider City area.

2.3 This affordable housing proposal will contribute to the provision of affordable and low-cost housing for the residents and families in the Longlevens area. The proposals will comprise rendered/brick walls with hipped roofs to provide a development which is compatible with its surroundings. Gardens, paving and planting for the scheme will also be provided, as well as four parking spaces to serve the proposed dwellings.

PLANNING HISTORY

2.4 The site has no recent planning history and this has been confirmed via the pre-application letter. The site is however brownfield land and within the main urban and residential area.

PRE-APPLICATION ADVICE

2.5 Pre-application advice was received from the council on the 23rd November 2021, from Planning Officer David Millinship (ref: 21/01076/PREAPP – see appendix A). Key points were raised surrounding layout and design, highways, residential amenity, biodiversity, and drainage.

2.6 The Planning Officer comments noted that *"the application site is within the Gloucester urban area, where new residential development is supported in general principle by JCS policies SP1, SP2 and SD10. Para.4 of SP10 states that within these built-up areas infilling is supported. The guidance for SP10 states that infilling would be the development of an under-developed plot well related to existing built development. I consider the application site is well-related to existing built development and the proposal to construct two dwellings is of a small-scale. I also accept that the wider plot is underdeveloped, compared to the (generally smaller) plot sizes of adjacent properties."*

2.7 As confirmed by the planning officer's comments, the location of the site and its surrounding uses support the principle of development. The application site is in the principal urban area and it is near one of the city's main routes providing easy access to services and facilities for future residents. Further, the site is conveniently located relative to various bus services, meaning that occupants of the site will have access to a wide range of local towns; therefore making it an ideal location for housing.

2.8 This minor development proposes 2No. dwellings and therefore addresses a small part of the local need (detailed further later in this statement). The planning officer also confirms *"in broad terms, the proposed bungalows are of an appropriate scale and design."*

2.9 In relation to access arrangements, the planning officer comments states *"I consider there is a low likelihood that an objection to the development would be made by the county council Highways Development Management Officer."* A transport statement accompanies this application, which provides full details of highways and access arrangements including more detailed considerations such as passing space, servicing, refuse and storage collection points. This application also includes various drawings to illustrate the proposed highways and access provisions.

2.10 With regard to the proposed siting of the dwellings, the planning officer confirms *"they would be set in a backland relationship with the surrounding dwellings which, although uncommon in the wider area, would not be harmful to the established suburban character."* Further details in this regard are provided on the accompanying site plan and design and access statement.

2.11 In terms of amenity, it was noted by the planning officer that, *"due to the proposed scale of the buildings and separation distances to neighbouring properties, I do not consider that unacceptable harm to daylight or outlook available to neighbouring dwellings would arise from the proposed development. The new dwellings would be clearly visible from a number of neighbouring residential dwellings but, I do not consider they would be experienced as overbearing".* In addition, the planning officer states *"no windows serving habitable rooms should be proposed within the first-floor side elevation of the dwellings, particularly overlooking 52-58 Meadowleaze. Any non-habitable windows should be obscure-glazed and non-opening."*

2.12 Care has been taken to ensure that design limits any impact on the amenity of neighbouring properties in accordance with the planning officer's comments. The proposed design has taken into account the surrounding scale, size, form and

character and has adopted a design that is in line with surrounding dwellings. In addition, windows have been sensitively placed so as to avoid affecting any neighbouring properties. Please see the submitted drawings for more information, and the further analysis below.

2.13 The drainage and flood risk comments note that the proposed development is within a low-risk river and surface water flooding area. As such a Flood Risk Assessment (FRA) will not be required. The requested foul and surface water drainage details have been provided with the application, and this demonstrates how surface water and run off will be mitigated with SuDs and following the guidance set out in the pre-app. For more information please see the submitted Drainage Strategy.

2.14 It is noted that the pre-application response indicates that a scheme of biodiversity net gains is likely to be sought via a planning condition. The applicant is happy with this approach and will arrange for the biodiversity measures to be put in place at the appropriate time.

2.15 The key constraints demonstrated as affecting the Site have been resolved:

- Access arrangements and parking;
- Impact on residential amenity;
- Design considerations.

The above findings demonstrate that the technical constraints identified are all capable of being dealt with and therefore the principle of development is acceptable.

3.0 Policy considerations

3.1 Section 70 of the Town and Country Planning Act states that Local Planning Authorities should have regard to:

(a) the provisions of the development plan, so far as material to the application,
(b) any local finance considerations, so far as material to the application, and
(c) any other material considerations."

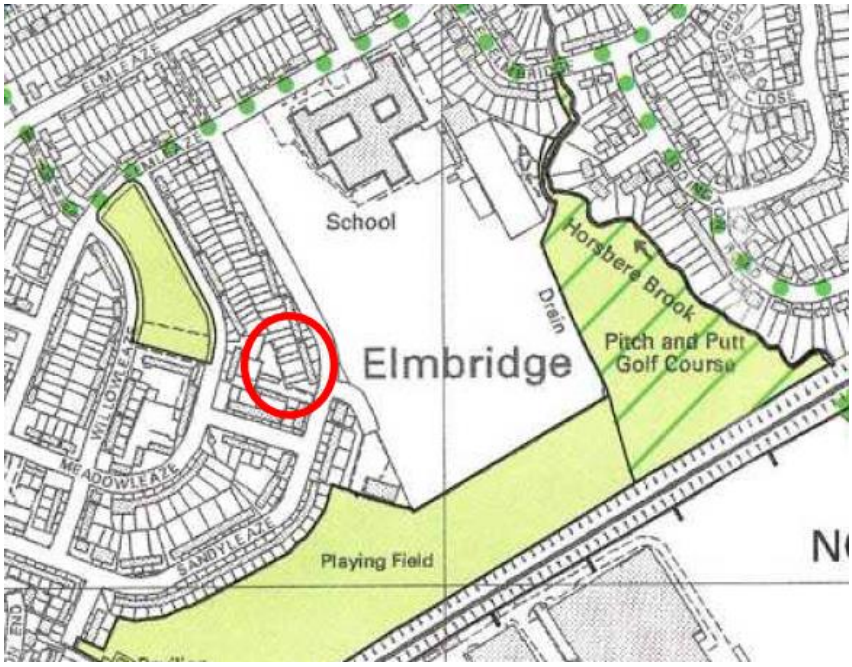
3.2 Additionally, section 38(6) of the Planning and Compulsory Purchase Act 2004 states that, "*If regard is to be had to the development plan for the purposes of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise*." The NPPF is such a material consideration.

3.3 In order to consider the acceptability of the scheme, it is necessary to assess the proposal against both the Joint Core Strategy (JCS) for Gloucester, Cheltenham and Tewkesbury adopted December 2017 and relevant policies from the National Planning Policy Framework (NPPF). In terms of the emerging Gloucester City Plan, the council is currently in the process of consulting on the Main Modifications. The plan is therefore at a relatively advanced stage given that the modifications are required to make the plan sound. It has already been found to be legally compliant and to have met the duty to co-operate. In this regard, it should be noted that the relevant policy considerations have been taken into account as part of the proposed development.

3.4 The saved policies within the Gloucester Local Plan (1983), and those set out in the unadopted Second Stage Deposit of Gloucester Local Plan (2002) are either superseded or no longer relevant. The pre-application response confirms that the 1983 Local Plan is out-of-date and superseded by more recent planning policy including the NPPF and the JCS, and makes no reference to the specific policies in 2002 Local Plan.

3.5 Given that the proposal is for residential development, this section will consider Local Plan policies relevant to open market housing, taking into account the fact that the scheme itself is for 100% affordable housing.

3.6 Notwithstanding the lack of weight to be given to the policies in the unadopted 2002 Local Plan, its proposals map (below) illustrates that there are no landscape or other designations associated with the Site.



(Local Plan image deposit 2002) Gloucester City Council Proposals Map Gloucester from the 2002 Local Plan.

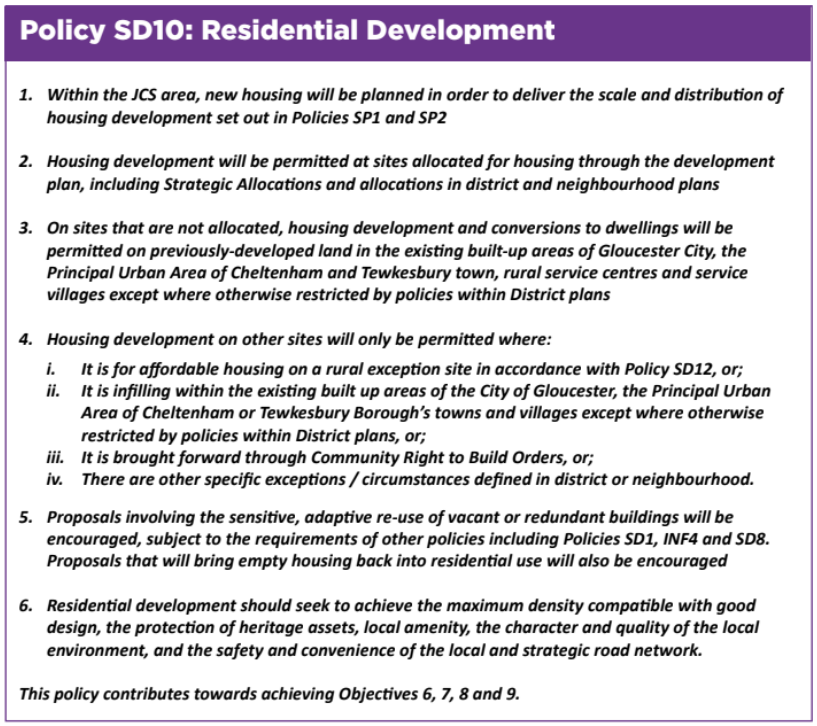
DETAILED CONSIDERATIONS

Principle of Development

3.7 The Joint Core Strategy Policy SP1 (The need for new development) states that across the Local Plan period from 2011- 2031 approximately 35,175 new homes will be needed. The housing requirement specifically for Gloucester is at least 14,359 new homes. Further to this the Policy outlines that new development is to be delivered within the existing urban areas.

3.8 JCS Policy SP2 (Distribution of new development) identifies Gloucester, (and Cheltenham), as the main focus for growth within the JCS area. It directs that housing needed to meet Gloucester's requirement for new homes will be provided within its administrative area and by means of cross-boundary urban extensions.

3.9 Policy SD10 (Residential development) is set out below. Paragraph 3, which is relevant to the proposals, confirms that housing development will be permitted on previously-developed land in the existing built up areas of Gloucester City.



Policy SD10: Residential Development

1. *Within the JCS area, new housing will be planned in order to deliver the scale and distribution of housing development set out in Policies SP1 and SP2*

2. *Housing development will be permitted at sites allocated for housing through the development plan, including Strategic Allocations and allocations in district and neighbourhood plans*

3. *On sites that are not allocated, housing development and conversions to dwellings will be permitted on previously-developed land in the existing built-up areas of Gloucester City, the Principal Urban Area of Cheltenham and Tewkesbury town, rural service centres and service villages except where otherwise restricted by policies within District plans*

4. *Housing development on other sites will only be permitted where:*
   - i. *It is for affordable housing on a rural exception site in accordance with Policy SD12, or;*
   - ii. *It is infilling within the existing built up areas of the City of Gloucester, the Principal Urban Area of Cheltenham or Tewkesbury Borough's towns and villages except where otherwise restricted by policies within District plans, or;*
   - iii. *It is brought forward through Community Right to Build Orders, or;*
   - iv. *There are other specific exceptions / circumstances defined in district or neighbourhood.*

5. *Proposals involving the sensitive, adaptive re-use of vacant or redundant buildings will be encouraged, subject to the requirements of other policies including Policies SD1, INF4 and SD8. Proposals that will bring empty housing back into residential use will also be encouraged*

6. *Residential development should seek to achieve the maximum density compatible with good design, the protection of heritage assets, local amenity, the character and quality of the local environment, and the safety and convenience of the local and strategic road network.*

This policy contributes towards achieving Objectives 6, 7, 8 and 9.

Policy SD10 of the JCS

3.10 Given that the site is within the existing built-up area and has easy access to services, facilities, and public transport, the site is a highly sustainable location for new housing development. Locating new housing in sustainable locations is undoubtedly one of the central goals of the NPPF. As confirmed above, Policy SD10 of the JCS presumes in favour of residential development within the existing built-up area. The proposals also comply with paragraph 6 of JCS Policy SD10 which states that residential development should seek to achieve maximum density compatible with amenity, character, highways and the environment.

3.11 Beyond this, the council must significantly boost the supply of housing in its area in accordance with paragraph 60 of the NPPF.

3.12 The introduction of the Housing Delivery Test (HDT) at paragraph 76 of the NPPF emphasises the need for local planning authorities to monitor the delivery of their housing requirements; to ensure sites are built out. The proposed development will assist the council in meeting its targets. GCH has consistently demonstrated that it converts planning permissions into homes in an efficient and effective manner.

3.13 Paragraph 69 supports development of small and medium sites and recognises the important contribution that these sites can have to a five year supply. Local

Authorities are required to "*support the development of windfall sites through their policies and decisions – giving great weight to the benefits of using suitable sites within existing settlements for homes"*. In this regard, it is important to note Gloucester City Council's five year housing land supply figure which was most recently calculated at 5.02 years (based on the Liverpool method). However, when the Sedgefield approach is used to calculate the local authority's five year supply (the correct approach recommended by national planning policy), GCC's five year housing land supply is in fact significantly lower, at 4.15 years. This should be an important material consideration when assessing the acceptability of the proposed development.

3.14 The NPPF contains significant support for the delivery of housing on previously developed land and supports the reuse of derelict and brownfield land. Paragraph 119 states; "*Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions.*" Further to this, JCS policy SP1 prioritises the effective reuse of previously developed land, such as the application site.

3.15 Criterion c and d, paragraph 120 of the NPPF states that planning policies and decisions should;

"give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land" and

"promote and support the development of under-utilised land and buildings, especially if this would help to meet identified needs for housing where land supply is constrained and available sites could be used more effectively (for example converting space above shops, and building on or above service yards, car parks, lock-ups and railway infrastructure)"

3.16 Given that this application seeks the demolition of garages and reuse of the land for residential dwellings and is in accordance with the policies of the NPPF encouraging the redevelopment of brownfield and underutilised sites such as this, use of the site for housing is clearly acceptable in principle. Indeed, this is confirmed by the pre-application advice which specifies, *"the application site is within the Gloucester urban area, where new residential development is supported in general principle by JCS policies SP1, SP2 and SD10. Para.4 of SP10 states that within these built-up areas infilling is supported. The guidance for SP10 states that infilling would be the development of an under-developed plot well related to existing built development. I consider the application site is well-related to*

existing built development and the proposal to construct two dwellings is of a small-scale. I also accept that the wider plot is underdeveloped, compared to the (generally smaller) plot sizes of adjacent properties."

3.17 Finally, the proposed development is in accordance with emerging City Plan policy A1 '*effective and efficient use of land and buildings'* as it is proposing to reuse vacant and unkempt land, is of an appropriate scale and would provide improvements to the natural and built environment as well as providing adequate amenity space for future residents.

Affordable Housing

3.18 In accordance with Pararaph 1 (i) of Policy SD11 of the JCS, the scheme is capable of better meeting the needs of the local area through the provision of additional affordable housing in an area where there is a proven need. This, in turn, will better meet the wider requirements and ambitions of the Local Plan and provide social mobililty. The proposals also seek to achieve adequate levels of amenity and accessibility, as set out further below and in the submitted design and access statement.

3.19 The proposal will contribute towards the Gloucester City Council and the wider JCS area's need for affordable housing. Through the provision of 100% affordable housing, the scheme clearly exceeds the thresholds in JCS policy SD12. Furthermore, the proposal contributes to the Strategic Housing Market Assessment used as part of the JCS evidence base in which it was identified that there is a need for 638 affordable houses per year across the JCS area.

3.20 From the above, it is clear that the site is suitable for open market housing. However, the proposals go beyond this, with the intention that both dwellings will be affordable in accordance with the definition set out in the NPPF at Annex 2. This is an additional benefit weighing in favour of the proposals.

3.21 There is a high need for affordable housing in Gloucester, and this proposal will contribute to providing safe and affordable homes to a range of local residents, providing suitable tenures for a range of needs. The applicant has discussed this proposal with the council's housing enabling officer, and the scheme meets the Nationally Described Minimum Space Standard.

Design

3.22 The design of the scheme is in accordance with paragraph 130 of the NPPF in that it will:

- function well and add to the area's overall quality;
- be visually attractive as a result of its good architecture, layout, and the introduction of new soft landscaping;
- be sympathetic to local character;
- maintain the area's sense of place;
- optimise the site's potential, by providing an appropriate mix of dwelling types and sizes, which will help to support local facilities and public transport; and
- Provide a high standard of amenity.

3.23 Locally, JCS Policy SD3 (Sustainable design and construction) requires sustainable design and construction and SD4 (Design requirements) sets out design requirements for new development. JCS Policy SD6 (Landscape) seeks to protect landscape character.

3.24 The design of the proposed development is, for the reasons set out above (and in the Design and Access Statement), consistent with the design requirements set out in JCS Policy SD4. The proposed development will also be built in accordance with up-to-date construction standards and best practice, in accordance with JCS Policy SD3.

Amenity

3.25 The proposed development has been carefully designed so that it will provide a high standard of amenity for future users in accordance with paragraph 119 of the NPPF. The scheme provides ample amenity space for future occupiers of the Site, incorporating boundary treatments and landscaping to ensure that outdoor space is a pleasant and private area for residents to use.

3.26 The impact on occupiers of neighbouring buildings has also been considered, for example, the provision of bungalows rather than two storey dwellings and the siting of the proposed houses relative to existing dwellings, as well as the careful placement of windows to protect the privacy of neighbours and avoid overlooking.

3.27 The development as a whole has been carefully designed to avoid unacceptable harm to local amenity and that of neighbouring occupants, in accordance with JCS Policy SD14.

3.28 Policy SD14 (Health and environmental quality) sets out development control criteria aimed at securing health and environmental quality. The requirements of this policy are considered to have been met and the scheme will not cause unacceptable harm to neighbouring occupants and arguably improves environmental quality by putting an underused and visually unappealing site to better use.

Social and Economic Benefits

3.29 Paragraph 82 of the NPPF identifies inadequate housing and a poor environment as barriers to investment and economic growth. There are many economic advantages which can be brought about through housing development, particularly in a location so close to shops and services. Paragraph 86 states that councils should recognise that residential development plays an important role in ensuring the vitality of centres and they should encourage such development on appropriate sites.

3.30 The visual improvement that will result from this proposal, the reuse of previously developed land, provision of more formal/secure parking, and the additional security that this development will bring are all material considerations that add positive benefits to the locality.

Other Matters

3.31 The drainage plans submitted with the application demonstrate that runoff can be managed. The applicant is committed to the principle of sustainable urban drainage subject to the suitability of the ground conditions. It is respectfully requested that a suitably worded condition be imposed to secure the proposed surface water drainage details post decision.

3.32 The NPPF outlines the need for well-designed places, paragraph 132 notes *"Design quality should be considered throughout the evolution and assessment of individual proposals. Early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes is important."* In this instance our client Gloucester City Homes has carried out a range of work and consultation at an early stage of this application to include the local planning authority and the wider community.

3.33 JCS Policy INF1 (Transport Network) requires all development to provide safe and accessible connections to the transport network to enable travel choice for residents and commuters. The application site is sustainably located within the urban area and offers a wide ranges of transport routes, from footpaths and cycle paths, to bus routes and access to the Gloucester City train and bus stations.

3.34 Policy INF2 (Flood Risk Management), this policy sets out the wider requirements for development, seeking to guide development to areas at lower risk of flooding. The site is in flood zone 1, and therefore adheres to this policy.

4.0 Conclusions

4.1 This application is for the demolition of existing garages and the erection of 2 bungalows with associated parking and landscaping on land off Sandyleaze, Longlevens.

4.2 The proposals present an excellent opportunity to bring previously developed land back into a more beneficial use, that the local community will benefit from.

4.3 The site is ideal for residential development since it is within the built-up area and within easy reach of the town centre by foot or public transport, to access services, facilities, and regional and national public transport. The application will assist in boosting the council's supply of housing to help it meet housing delivery targets. It further has a social benefit of delivering low cost affordable housing to the city.

4.4 This statement has demonstrated that the proposed development complies with the policies set out in the revised NPPF Framework and the JCS, and the benefits of the scheme outweigh any very minor adverse impacts.

4.5 It is therefore respectfully requested that the Council support this application and grant planning permission.

Appendix A

Gloucester City Council
Transforming Your City

Development Control
PO Box 3252
Gloucester, GL1 9FW
www.gloucester.gov.uk
23rd November 2021
David Millinship
(01452) 01452 123456
Development.control@gloucester.g

Gloucester City Homes
c/o Mr Mark Godson
SF Planning Ltd
9 College Green

Dear Mr Godson

BY EMAIL ONLY

Our Reference:	**21/01076/PREAPP**
Location:	**Garages And Parking Area Rear Of 65 To 77 Sandyleaze Gloucester**
Proposal:	**Erection of 2no. 1B2P bungalows.**

I refer to your pre-application enquiry received on **15.09.2021** concerning the above site. I have assessed the proposal against the submitted information and the response offered is limited to the detail submitted.

SITE HISTORY
None relevant

Development Plan Policies
Section 70(2) of the Town and Country Planning Act 1990 (as amended) states that in dealing with a planning application, the Local Planning Authority should have regard to the following:

a) the provisions of the development plan, so far as material to the application;
b) any local finance considerations, so far as material to the application; and
c) any other material considerations.

The development plan consists of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy (JCS) and the partially saved 1983 City of Gloucester Local Plan.

Gloucester, Cheltenham and Tewkesbury Joint Core Strategy
The Gloucester, Cheltenham and Tewkesbury Joint Core Strategy (JCS) was adopted December 2017 and therefore provides the up to date development plan for the City.

Relevant policies from the JCS include:

SP1 - The need for new development;
SP2 – Distribution of new development;
SD3 – Sustainable design and construction;
SD4 – Design requirements;
SD6 – Landscape;
SD9 – Biodiversity and geodiversity;

SD10 – Residential development;
SD11 – Housing mix and standards;
SD14 – Health and environmental quality;
INF1 –Transport network;
INF2 – Flood risk management;
INF3 – Green Infrastructure.

City of Gloucester Local Plan (Adopted 14 September 1983)
The statutory Development Plan for Gloucester includes the partially saved 1983 City of Gloucester Local Plan. Paragraph 213 of the NPPF states that '…due weight should be given to relevant policies in existing plans according to their degree of consistency with this framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given.'

The majority of the policies in the 1983 Local Plan are out-of-date and superseded by later planning policy including the NPPF and the Joint Core Strategy.

Emerging Development Plan - Gloucester City Plan (GCP)
The Gloucester City Plan ("City Plan") will deliver the JCS at the local level and provide policies addressing local issues and opportunities in the City.

The emerging Gloucester City Plan (GCP) was submitted to the Planning Inspectorate 18th November 2020. Hearing Sessions concluded on Wednesday 9th June 2021. The Inspector's has issued the council with their Post Hearing Letter asking the LPA to prepare a schedule of potential main modifications (for formal consultation) before the plan can be considered to be sound. On the basis of the stage of preparation that the plan has reached, and the consistency of its policies with the NPPF, the individual policies of the plan can be afforded moderate-to-significant weight, depending on the number of unresolved objections.

The status of the GCP should be checked prior to the submission of any future planning application as (as the plan progresses to adoption) the weight able to be given to the individual policies will increase.

Relevant policies include:

A1 – Effective and efficient use of land and buildings;
C1 – Active design and accessibility;
C5 – Air quality;
E2 – Biodiversity and geodiversity;
E4 – Trees, woodlands and hedgerows;
E5 – Green infrastructure: Building with nature;
E6 – Flooding, sustainable drainage, and wastewater;
F1 – Materials and finishes;
F2 – Landscape and planting;
F6 – Nationally described space standards;
G1 – Sustainable transport;
G2 – Charging infrastructure for electric vehicles;
G3 – Cycling;
G4 – Walking.

Other Material Considerations
Gloucester Local Plan, Second Stage Deposit 2002
Regard is also had to the policies contained within the 2002 Revised Deposit Draft Local Plan which was subject to two comprehensive periods of public consultation and adopted by the Council for development control purposes. The National Planning Policy Framework has been published and is also a material consideration.

All policies can be viewed at the relevant website address: - Gloucester Local Plan policies – https://www.gloucester.gov.uk/planning-development/planning-policy/; and Department of Community and Local Government planning policies - www.communities.gov.uk/planningandbuilding/planning/.

KEY CONSTRAINTS AFFECTING THE SITE

- Site access;
- Neighbouring residential properties;
- Possible contamination.

SUMMARY OF RESPONSES RECEIVED

None received (at the time of writing).

CONSULTATIONS

Should a full planning application be submitted, it is highly likely the below consultees will be contacted to provide comments on the development.

- Highways Development Management (Gloucester County Council);
- Environmental Protection (Gloucester City Council);
- Noise (Worcester Environmental Services);
- Severn Trent Water.

Consultation letters would also be sent to all neighbouring properties sharing a common boundary with the site.

OFFICER ASSESSMENT

It is considered that the main issues with regards to this application are as follows:

- Principle;
- Site layout and access;
- Residential amenity.

Principle

The application site is within the Gloucester urban area, where new residential development is supported in general principle by JCS policies SP1, SP2 and SD10. Para.4 of SP10 states that within these built-up areas infilling is supported. The guidance for SP10 states that infilling would be the development of an under-developed plot well related to existing built development. I consider the application site is well-related to existing built development and the proposal to construct two dwellings is of a small-scale. I also accept that the wider plot is underdeveloped, compared to the (generally smaller) plot sizes of adjacent properties.

I have also had regard to emerging policy A1 of the GCP which seeks to ensure that new development proposals make effective and efficient use of land and buildings. The site is located in a broadly sustainable urban location and proposes a small-scale development of two new dwellings that I consider are in scale with the character of the wider area. GCP policy A1 also sets out several criteria (in relation to design, highways impacts and amenity) that I consider the proposal has potential to be able to comply with (these are assessed in greater detail in the relevant sections of the below report).

As such, I am satisfied the proposal does not conflict with the aims of the development plan in terms of the principle of the development in this location.

Access, scale and site layout

Access to the existing garages would be used for the proposed dwellings. Whilst vehicle movements may increase (particularly at peak times – morning and evening) I consider there is a low likelihood that an objection to the development would be made by the county council Highways Development Management Officer. Visibility splays that can be achieved should be shown on plan.

In broad terms, the proposed bungalows are of an appropriate scale and design. They would be set in a backland relationship with the surrounding dwellings which, although uncommon in the wider area, would not be harmful to the established suburban character. They would sit at a 90-degree angle to the closest neighbouring dwellings at 52-56 Meadowleaze at approximately 12.5 metres separation distance. Other neighbouring dwellings would be over 21 metres (building-to-building) from the proposed dwellings.

The proposed layout appears to offer sufficient space within the site for domestic vehicle parking and turning areas and private outdoor amenity areas (rear gardens) for the two new dwellings. It should be demonstrated that parking can be provided in line with the requirements of the Manual for Gloucestershire Streets (MfGS) with at least one electric vehicle charging point per dwelling and covered secure cycle storage per plot.

A scheme of site planting (trees and shrubs) is likely to be sought through a planning condition in the event any future application can be supported.

Residential amenities
Due to the proposed scale of the buildings and separation distances to neighbouring properties, I do not consider that unacceptable harm to daylight or outlook available to neighbouring dwellings would arise from the proposed development. The new dwellings would be clearly visible from a number of neighbouring residential dwellings but, I do not consider they would be experienced as overbearing.

No windows serving habitable rooms should be proposed to be set within the first-floor side elevation of the dwellings, particularly overlooking 52-58 Meadowleaze. Any non-habitable windows should be obscure-glazed and non-opening (up to 1.8m in height from the internal first floor level).

There is a possibility that a construction traffic and environmental management plan (CTEMP) may be secured by planning condition (should any future planning application be able to be supported) to ensure suitable control is secured over potential harm to neighbouring residential amenities during the construction phase.

Overall, I consider the development can comply with the aims of JCS policies SD4 and SD14.

Other matters
There is potential for the existing garages to have been constructed from materials that are now considered to be contaminated (most likely asbestos). Previous use of the site could also have resulted in contamination of the land, although this is low risk in my view. It is possible that environmental protection may seek some form of precautionary approach to possible contamination, but I consider this is likely to be either through a request for submission of a Phase 1 Site Survey or a suitably worded planning condition.

The site is within a low-risk river and surface water flooding area. However, at least indicative details of both foul and surface water drainage measures should be submitted with any future application to demonstrate that foul connection is possible and that surface water can be managed within the site or with an outflow to the public sewer or a nearby watercourse that is restricted to 0.2 ltr/s.

It is likely that a scheme of biodiversity net gains would be sought via a planning condition. This could incorporate the placement of bird boxes and implementation of a native species site planting scheme.

Infrastructure Requirements
The Council has adopted a Community Infrastructure Levy (CIL). Residential developments of 11 dwellings or more are subject to the CIL requirements and further information is available at the following link:

https://www.jointcorestrategy.org/community-infrastructure-levy

Information required to Support a Planning Application
The Validation Requirements for this type of planning application are likely to be as follows:

- Completed 'Application for Planning Permission' form;
- Site location plan (scale of 1:250, identifying the application site outlined in red and showing the direction of north);
- Block plan (at a scale of 1:500) showing the site boundaries, proposed car parking, cycle storage and bin storage areas.
- Existing and proposed floor plans (at a scale of 1:50 or 1:100),
- Foul and surface water drainage details (at least an indicative scheme),
- Fee of £924 (correct at the time of writing).

This advice is based on the information submitted and is offered without prejudice to the City Council's decision on this or any subsequent planning application. Once an application is submitted, all adjoining occupiers at neighbouring sites will be notified by letter, and will have 21 days to submit any comments on the proposals, which will then be taken into consideration when determining the application.

Other issues may arise following the receipt of further detailed information, responses from consultees and neighbours associated with any future application.

Your attention is drawn to the requirements of the Building Regulations, which may be required to be obtained as a separate consent to any future planning application. You are advised to contact the Gloucestershire Building Control Partnership on 01453 754871for further information.

Please let me know if you require any further advice or clarification on any of the above matters.

Your feedback about the pre-application service that you have received is really important to us, so it would be great if you could complete our short survey.

Yours sincerely

[redacted]
David Millinship
Senior Planning Officer

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REGISTERED NO: ENGLAND 06114677

COTSWOLD TRANSPORT PLANNING

Gloucester City Homes

Garage Site, Sandyleaze, Gloucester

Technical Note

April 2022

Garage Site, Sandyleaze, Gloucester

Technical Note – Issue

21-0554

April 2022

1. Introduction

1.1 Cotswold Transport Planning Ltd (CTP) have been appointed by Gloucester City Homes to provide a Technical Note (TN) to support a planning application for the demolition of the existing garage site and creation of two adapted bungalows.

1.2 This TN concludes that the proposed development in highway and transportation terms is acceptable, and there are no such reasons that should prevent Gloucestershire County Council (GCC) from recommending approval of this application.

2. Site Location and Composition

2.1 The application site is located off Sandyleaze, within the Elmbridge area of Gloucester. It is located opposite Old Richians RFC approximately 3.6km east of Gloucester City Centre.

2.2 The site is bound by residential dwellings to the north, south, east and west, and benefits from an existing vehicular access, in the form of a vehicle crossover with Sandyleaze.

2.3 The application site currently consists of 18 garages and an area of hard standing. It is understood that six of the garages are currently occupied. As part of the licence agreement for users the garages should only be used as parking for vehicles. It is proposed that the occupied garages will be vacated with all the garage units demolished. Gloucester City Homes will offer existing users alternative garages.

2.4 The site location plan is provided at **Appendix A**.

3. Local Highway Network

3.1 Sandyleaze is an illuminated, single carriageway, two-way road with a 30mph speed limit, which is approximately 5.5m wide with 1.8m – 2m wide footways along the dwelling frontages on Sandyleaze. Sandyleaze is a 'crescent' road linking to Elmbridge Road to the west and Oakleaze to the north. It is a residential access road which also provides access to Old Richians RFC playing fields.

3.2 There are no parking restrictions along Sandyleaze and on street parking is observed along both sides of the carriageway, therefore reducing the effective carriageway width in some locations.

3.3 In order to establish the existing traffic conditions on Sandyleaze in the vicinity of the application site access, a seven-day automatic traffic count (ATC) survey was undertaken by 360 TSL Ltd, an independent traffic surveyor, between Thursday 23rd September 2021 and Wednesday 29th September 2021.

3.4 Based on the ATC survey, Sandyleaze has an average daily speed of 16.3mph and 18.0mph northbound and southbound, respectively, and 85th percentile speeds of 22.5mph and 23.5mph northbound and southbound, respectively.

3.5 In addition, based on the ATC survey, Sandyleaze has an average daily traffic flow of 194 and 168 vehicles northbound and southbound respectively, and an average of 362 two-way vehicles.

3.6 The full results of the ATC is contained in **Appendix B**.

4. Personal Injury Collisions

4.1 For the purposes of this assessment, Personal Injury Collision (PIC) data has been extracted from the CrashMap database www.crashmap.co.uk for the highway network immediately surrounding the application site, for the most recent five-year period ending June 2021. The study area for the analysis is contained in **Appendix C**.

4.2 The review identified that no PIC's have occurred on Sandyleaze in the immediate vicinity of the application site during the most recently available five-year period.

4.3 Therefore, there is no pattern or history of collisions in the immediate locality of the site, and it is considered that there is no existing safety issue on the local highway network that could be exacerbated by the development proposals.

5. Relevant Transport Planning Policy

5.1 The relevant transportation policies are set out in the following National and Local documents:

i) National Planning Policy Framework (July 2021);
ii) Gloucestershire's Local Transport Plan 2020 – 2041;
iii) Gloucester, Cheltenham and Tewkesbury Joint Core Strategy to 2031; and

iv) Manual for Gloucestershire's Streets (July 2020) and the Addendum (October 2021).

National Planning Policy Framework (July 2021)

5.2 National guidance on planning is set out in the updated National Planning Policy Framework (NPPF) published in July 2021 by the Ministry of Housing, Communities and Local Government. It sets out the Government's planning policies for England and how these should be applied. At the heart of the NPPF is a presumption in favour of sustainable development.

5.3 Chapter 9 of the NPPF deals with *'Promoting sustainable transport' and Paragraph 104 of the NPPF states that 'transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*

a) the potential impacts of development on transport networks can be addressed;
b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised - for example in relation to the scale, location or density of development that can be accommodated;
c) opportunities to promote walking, cycling and public transport use are identified and pursued;
d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.'

5.4 Paragraph 110 states that 'In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, and other transport elements and content of associated standards reflects current national guidance, including the National Design Guide and National Model Design Code; and

d) *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.'*

5.5 Paragraph 111 states that 'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'.

5.6 Paragraph 112 states that 'applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment areas for bus or other public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
d) allow for the efficient delivery of goods, and access by services and emergency vehicles; and
e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'

Gloucestershire's Local Transport Plan 2020 - 2041

5.7 Gloucestershire's Local Transport Plan (LTP) sets out the issues and priorities for the county and identifies the approach to managing the increased transport demand which will go hand in hand with projected housing development and accelerated economic growth.

5.8 GCC's current vision for transport is for: *'A resilient transport network that enables sustainable economic growth by providing door to door travel choices*.'

5.9 The LTP includes six mode policy documents which together provide the context of local transport delivery within the county.

5.10 Looking towards 2041, Gloucestershire's vision for transport is for: *'A resilient transport network that enables sustainable economic growth by providing choices for all, making Gloucestershire a better place to live, work and visit*.'

5.11 The revised LTP outlines the transport strategy in two stages:

i) Until 2031, roughly in line with the time horizons for growth allocations in the adopted Local Plans; and

ii) Up to 2041, the vision for which it is envisioned will inform discussions with the local planning authorities on current Local Plan reviews, following which there will be another review of the LTP once Gloucestershire's areas of growth post 2031 are better understood.

Gloucester, Cheltenham and Tewkesbury Joint Core Strategy to 2031

5.12 The Joint Core Strategy (JCS) is a co-ordinated strategic development plan for Gloucester City, Cheltenham Borough and Tewkesbury Borough. It sets out the long-term vision and objectives for the area together with strategic policies for shaping new development and locations for new development up to 2031. The JCS was adopted by the three authorities in December 2017.

5.13 Policy INF1 addresses the Transport Network and states:

'1. Developers should provide safe and accessible connections to the transport network to enable travel choice for residents and commuters. All proposals should ensure that:

i) *Safe and efficient access to the highway network is provided for all transport modes;*

ii) *Connections are provided, where appropriate, to existing walking, cycling and passenger transport networks and should be designed to encourage maximum potential use;*

iii) *All opportunities are identified and taken, where appropriate, to extend and / or modify existing walking, cycling and public transport networks and links, to ensure that credible travel choices are provided by sustainable modes.*

2. Planning permission will be granted only where the impact of development is not considered to be severe. Where severe impacts that are attributable to the development are considered likely, including as a consequence of cumulative

impacts, they must be mitigated to the satisfaction of the Local Planning Authority in consultation with the Highway Authorities and in line with the Local Transport Plan.'

Manual for Gloucestershire's Streets

5.14 Manual for Gloucestershire's Streets (MfGS) was adopted in July 2020 and provides local guidance on how new developments within Gloucestershire can contribute to the provision of a safe and sustainable transport network. An addendum was published in October 2021.

5.15 The objectives of MfGS is to ensure that:

i) 'Development is located in communities which are, or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health;

ii) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; Safe and suitable access to the site can be achieved for all users; and

iii) Any significant impacts from the development on the transport network(in terms

iv) of capacity and congestion), or on highway safety, can be cost effectively

v) *mitigated to* an acceptable degree'.

5.16 Applicants for development should:-

i) Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – as far as possible – to facilitating across to high quality public transport, with layouts that maximise the catchment area for bus or other public transport with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

ii) Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

iii) Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards; Allow for the efficient delivery of goods, and access by services and emergency vehicles; and

iv) Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'

6. Development Proposals

6.1 The proposals seek planning permission for the demolition of the existing garage site at Sandyleaze and development of two adapted bungalows and associated infrastructure.

6.2 The proposed site layout plan is provided at **Appendix D.**

Site Access Arrangements

6.3 It is proposed that the existing vehicular access onto Sandyleaze will be retained to serve the two dwellings.

6.4 The existing use of the application site comprises 18 garages. It is considered reasonable that 18 garages would generate a greater number of trips than two adapted bungalows, given that the garage licence require them to be used as car parking only, and not for storage. On this basis it is not considered that the development proposals would result in an intensification of the existing access arrangement.

6.5 As part of the development proposals the existing access arrangements shall be retained to serve the two adapted bungalows.

6.6 On the basis that the proposed development will retain the existing access arrangements and would not result in an intensification of use, it is considered that the access arrangements would be suitable in terms of visibility to accommodate the development proposals.

6.7 In order to provide a robust assessment of the development proposals a review of the achievable visibility splays at the existing access has been undertaken.

Visibility Splay Assessment

Stopping Sight Distance – 'y' Distance

6.8 Stopping sight distance (SSD) is the distance which drivers need to see ahead in order to stop from a given speed.

6.9 MfS and MfS2 states that:

'*The Y distance represents the distance that a driver who is about to exit from the minor arm can see to left and right along the main alignment. For simplicity it has previously been measured along the nearside kerb line of the main arm, although vehicles will normally be travelling at a distance from the kerb line. Therefore a more accurate assessment of visibility splay is made by measuring to the nearside edge of the vehicle track*'

6.10 The 'y' distance is based on the SSD of drivers travelling on the major arms of a junction. In order to calculate the SSD a traffic survey was undertaken in the form of an ATC by 360 TSL Ltd, an independent traffic surveyor, on Sandyleaze in the vicinity of the application site access. The survey was undertaken between Thursday 23rd September 2021 and Wednesday 29th September 2021. Based on the ATC survey, Sandyleaze has an average daily speed of 16.3mph and 18.0mph northbound and southbound, respectively, and 85th percentile speeds of 22.5mph and 23.5mph northbound and southbound, respectively.

6.11 In order to calculate the required SSD, the following parameters have been utilised in accordance with MfS, given that the design speed is below 37mph with greater than 5% Ordinary Goods Vehicle (OGV1):

i) Reaction Time – 1.5 Seconds; and

ii) Deceleration Rate – 3.68 m/s.

6.12 On this basis, a 'y' distance of 30.8m and 28.8m is required to the north and south, respectively, with forward visibility of 33.2m and 31.2m to the rear of a car turning right into the application site and for a vehicle turning right into the application site, respectively.

'X' Distance

6.13 The 'x' distance is the measurement from the kerb line on the major arm into the minor arm junction, it represents the position of a driver egressing the minor arm. MfS and MfS2 sets out that:

'*An X distance of 2.4m should normally be used in most built-up situations, as this represents a reasonable maximum distance between the front of the car and the driver's eye. A minimum figure of 2m may be considered in some very lightly trafficked and slow speed situations when flows on the minor arm are low, but using this value will mean that the front of some vehicles will protrude slightly into the running carriageway of the major arm. The ability of drivers and cyclists to see this overhang from a reasonable distance and to manoeuvre around it without undue difficulty should be considered.*'

6.14 As set out in **Section 3** the ATC demonstrated an average daily flow of 362 two-way vehicle movements on Sandyleaze, with average daily speeds of 16.3mph and 18.0mph northbound and southbound, respectively, and 85th percentile speeds of 22.5mph and 23.5mph northbound and southbound, respectively.

6.15 On this basis, an 'x' distance of 2m is considered to be suitable, due to Sandyleaze being very lightly trafficked and a slow speed situation in accordance with MfS and MfS2.

Visibility Splay Drawings

6.16 CTP have undertaken two visibility splay drawings, which are deemed to be acceptable demonstrating 'x' distances of 2m and 2.4m.

6.17 The drawing contained in **Appendix E** demonstrates a visibility splay of 2m x 30.8m and 2m x 28.8m to the north and south respectively.

6.18 The drawing contained in **Appendix F** demonstrates a visibility splay of 2.4m x 30.8m and 2.4m x 28.8m to the north and south respectively.

6.19 The drawings demonstrate that the visibility splays are achievable within land in the ownership of the client or the adopted highway. The adopted highway boundary is contained in **Appendix G**.

6.20 An 'x' distance of 2.4m results in the 'y' distance being offset from the edge of the carriageway by 1.2m. Although this this is slightly beyond the nearside edge of the vehicle track, it is anticipated that it shall capture northbound vehicle and cycle movements.

6.21 As demonstrated on the drawings contained in **Appendix E** and **Appendix F**, suitable forward visibility can be achieved for right turning vehicles.

6.22 In addition, a forward visibility splay of 31.2m in accordance with 85th percentile northbound speeds can be achieved between the nearside edge of the vehicle track and the application site access. This accounts for drivers or cyclists' ability to see overhang from the site access to enable them to manoeuvre around it without undue difficulty.

Summary

6.23 It is considered that suitable junction visibility splays at the site access, in accordance with the 85th percentile speeds on Sandyleaze, can be achieved with a 2m or 2.4m 'x' distance. In addition, suitable forward visibility splays can be achieved for a vehicle turning right into the application site, as well as between the northbound nearside edge of the vehicle track and the application site access.

6.24 Notwithstanding this review of the visibility splays, the existing access serves 18 garages, and if all garages were in use, it is reasonable to assume that it would generate a greater amount of traffic than two adapted bungalows.

6.25 Considering that the development proposals would not result in an intensification of use and the review of the visibility splays demonstrates that the access is safe and suitable, it is considered that the development will not result in an unacceptable impact on highway safety.

Swept Path Analysis

6.26 A swept path analysis has been undertaken which demonstrates that an estate car can simultaneously access and egress the application site with suitable inter-visibility splays along the access road. The swept path analysis is contained in **Appendix H**.

Pedestrian Access

6.27 Pedestrian access to the application site will be via the site access from the footway on the western side of Sandyleaze. The pedestrian access to the site will be in the form of a shared surface street and in order to demonstrate that it is suitable to accommodate pedestrian movements, a review of local and national guidance has been undertaken.

6.28 GCC guidance set out within MfGS recommends that a private shared drive serving more than two dwellings should be a minimum of 4.1m for the first 15m from the public highway.

6.29 As the proposed development will provide vehicular access to two dwellings and a minimum carriageway width of 4.1m has been provided throughout, the shared surface is considered suitable to provide safe pedestrian access.

6.30 Allied to above, MfS, at paragraph 7.2.14 states that shared surface streets are likely work well in the following locations:

i) In short lengths, or where they form cul-de-sacs;
ii) Where the volume of motor traffic is less than 100 vehicles per hour; and
iii) Where parking is controlled or takes place in designated areas.

6.31 The proposed development is in full compliance with MfS guidance in relation to shared surface streets. The site will form a cul-de-sac, be subject to less than 100 vehicles movements per hour and parking for the proposed residential development will take place in designated areas so as to ensure parking does not impact pedestrian travel. On this basis, it is considered that a shared surface street is suitable to serve the development.

6.32 Overall, the access of the application site is considered to be safe and suitable for all users, in accordance with paragraph 110 of the NPPF.

Internal Access Arrangements

6.33 A private driveway / courtyard arrangement shall be retained to serve the application site, with new dedicated parking for each of the proposed dwellings and three additional visitor parking spaces.

Refuse Collection

6.34 Each dwelling shall have a location to store bins, which are located at a maximum distance of 49m from Sandyleaze. It is acknowledged that the bin stores are located beyond the recommended Manual for Streets (MfS) and Building Regulations guidance bin carry distance of 25m for a refuse collection operative. On this basis, residents will be required to wheel their bins to the carriageway edge, which will ensure that the refuse vehicle is not unduly delayed and refuse collection operatives are not required to wheel bins over the recommended carry distances.

6.35 It is acknowledged that the bin carry distance for residents is greater than the 30m recommended by MfS and Building Regulations guidance. However, it is clear in the Building Regulations guidance that these are not absolute standards and are purely recommendations. Prospective residents will be made aware of the refuse strategy and will be able to make an informed decision as to whether the arrangement will suit their needs. It is not considered that residents being required to wheel bins beyond recommended bin carry distances will have a material impact on the development proposal.

Fire Tender Access

6.36 A drawing demonstrating that a fire tender can access the application site is contained in **Appendix I**. The fire tender can access the furthest point of all plots within 45m, in accordance with Building Regulations guidance.

Delivery Vehicle Access

6.37 A drawing demonstrating that a 7.5t delivery vehicle can access the application site is contained in **Appendix J**.

Car Parking Provision

6.38 MfGS (October 2021 Addendum) recommends that one-bedroom dwellings should provide a minimum of one car parking space per dwelling.

6.39 The site layout plan demonstrates that each dwelling will be provided with two spaces and therefore the level of car parking provision is in accordance with MfGS.

Visitor Car Parking Provision

6.40 A total of three visitor car parking spaces has been provided within the application site. MfGS states that one visitor car parking space should be provided per five dwellings. On this basis the proposed visitor parking provision is in excess of the standards set out in MfGS and is therefore suitable to ensure that there is no car parking overspill from the application site into the local highway.

Bicycle Storage

6.41 In terms of the level of cycle parking provision proposed on-site, MfGS refers to LTN 1/20 – Cycle Infrastructure Design, stating *'the ratios in table 11-1 should be applied'*.

6.42 Table 11-1 within the TN 1/20 – Cycle Infrastructure Design states that for residential land-use, a cycle space should be provided per bedroom.

6.43 A minimum of one cycle parking space is therefore to be provided within the curtilage of each dwelling proposed on-site respectively, which are to be sheltered, secure and easily accessible.

Electric Vehicle Parking

6.44 In accordance with MfGS guidance, all dwellings will be fitted with electric vehicle charging infrastructure.

Parking Displacement

6.45 As stated in **Section 2**, the application site currently comprises 18 garages. Gloucester City Homes have advised that there are six garages currently in use. Gloucester City Homes are in discussions with existing uses to provide alternative garage provision.

7. Forecast Trip Generation

7.1 When considering a residential development, it is generally accepted that the critical periods, in terms of traffic impact on the adjacent highway network, are the weekday AM and PM peak hours, when traffic flows associated with the site combined with the traffic flows on the adjacent highway network are at their greatest.

7.2 It follows that should the impact of development traffic on the local road network be considered acceptable during these periods, then it would also be acceptable during other, less busy, periods of the week.

7.3 In order to assess the trip generation associated with the proposed development, residential sites with similar site characteristics have been identified in the TRICS database and average vehicle trip rates have been obtained. In regard to housing mix, an assessment has been undertaken for privately owned housing, in order to provide a robust assessment, although it should be noted that the dwellings will be affordable in nature.

7.4 Available TRICS sites were filtered to provide a comparable assessment to that proposed, based on the following selection criteria:

i) Sites located in Great Britain, excluding Greater London;
ii) Developments ranging in size between 5 - 20 dwellings;
iii) Weekday surveys, where impact of the proposed development would be greatest; and
iv) Sites located in edge of town or suburban areas.

7.5 The trip rates derived from the TRICS database for privately owned houses and the forecast vehicular trips are demonstrated in **Table 7.1**, with the full TRICS report contained in **Appendix K**.

Time Period	Trip Rates (per dwelling)			Vehicular Trips (Based on 2 dwellings)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00 - 09:00)	0.187	0.388	0.575	0	1	1
PM Peak (17:00 - 18:00)	0.237	0.115	0.352	0	0	1*
Daily (07:00 – 19:00)	2.264	2.417	4.681	5	5	9*

Table 7.1 – Forecast Trip Rates and Vehicular Trips – Privately Owned Houses
*Summation due to Rounding

7.6 **Table 7.1** indicates that a development of two privately owned houses is forecast to generate one vehicle trip in the AM and PM peak hours, with 9 daily two-way trips on the local highway network.

7.7 In view of the potential trip generation of the site, it is predicted that the development proposals would not have a detrimental traffic impact on the surrounding highway network, particularly given the extant use of the application site. The effects are therefore not considered to be severe in relation to paragraph 111 of the NPPF.

8. Conclusions

8.1 This TN has demonstrated the following:

i) A review of the local highway network and collision data in the vicinity of the site indicates that there are no apparent problems in relation to the current operation or safety of the local highways;

ii) The proposed access arrangements to the site are considered safe and suitable, with suitable visibility achievable in each direction, and an access design that conforms to GCC guidance;

iii) Proposed parking and cycle provision on-site will be in line with GCC parking standards for new developments, which will ensure that there is no adverse impact upon the local highway network;

iv) Refuse collection should be considered within the context and footprint of the development, and is considered suitable; and

v) The forecast trip generation, based on similar sites nationwide within the TRICs database, calculated for the proposed two dwellings identified there to be no significant impact on the local highway network during the weekday peak hour periods.

8.2 CTP conclude that the scheme will not result in an unacceptable impact on highway safety or a severe impact on the adjacent highway network, and therefore the proposal does not conflict with paragraph 111 of the NPPF. As such, there are no significant highways or transportation matters that would preclude GCC from recommending approving this planning application.

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Appendix A

Indicative Site Location Plan

www.quattrodesign.co.uk

NOTES

REVISIONS

REV: DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Site Location Plan

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE 1:1250@A3

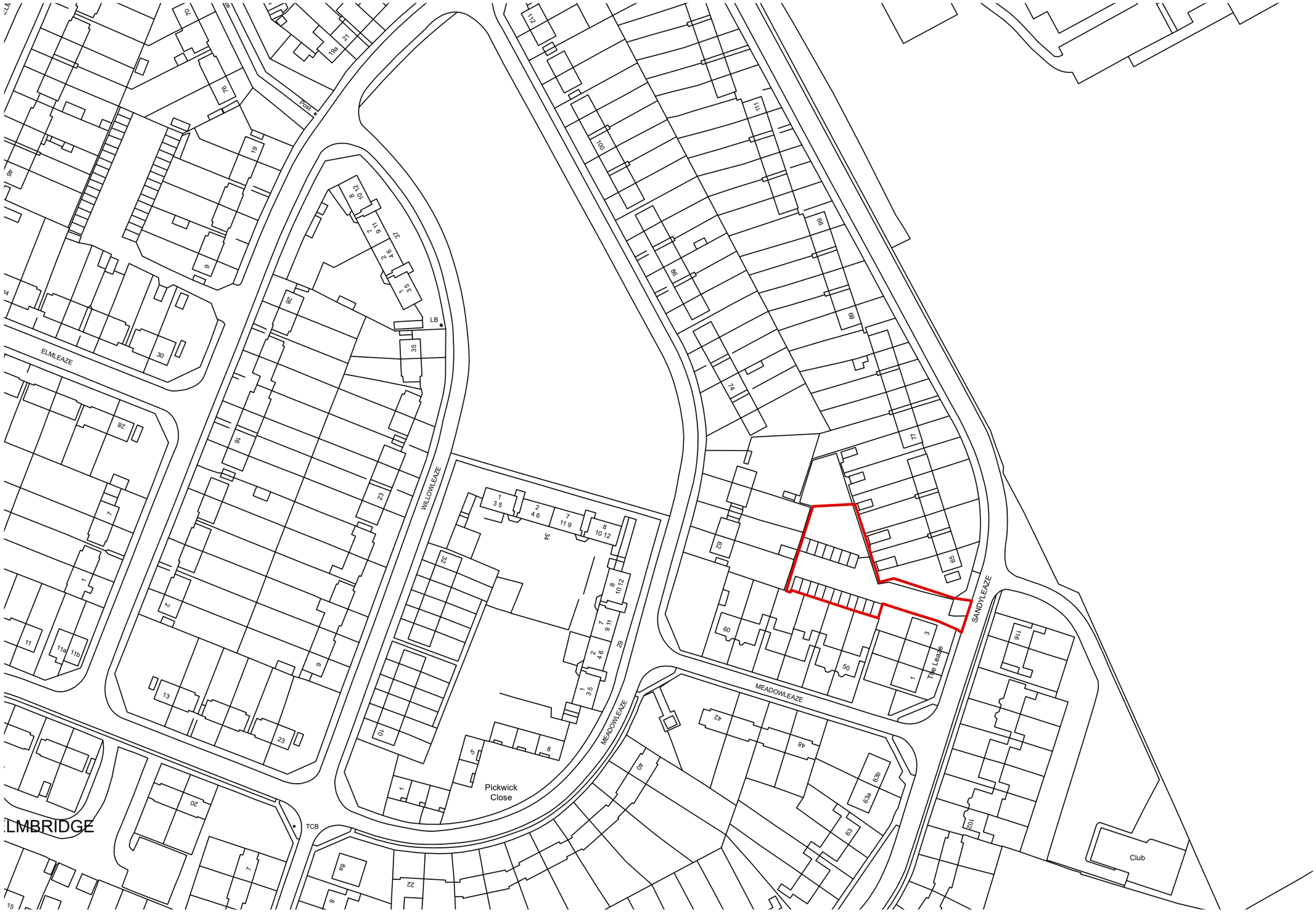
DATE Mar 2022

Quattro designarchitects

DRAWING NO. **REV**

6614-P-01 **-**

Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY [redacted]



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Appendix B

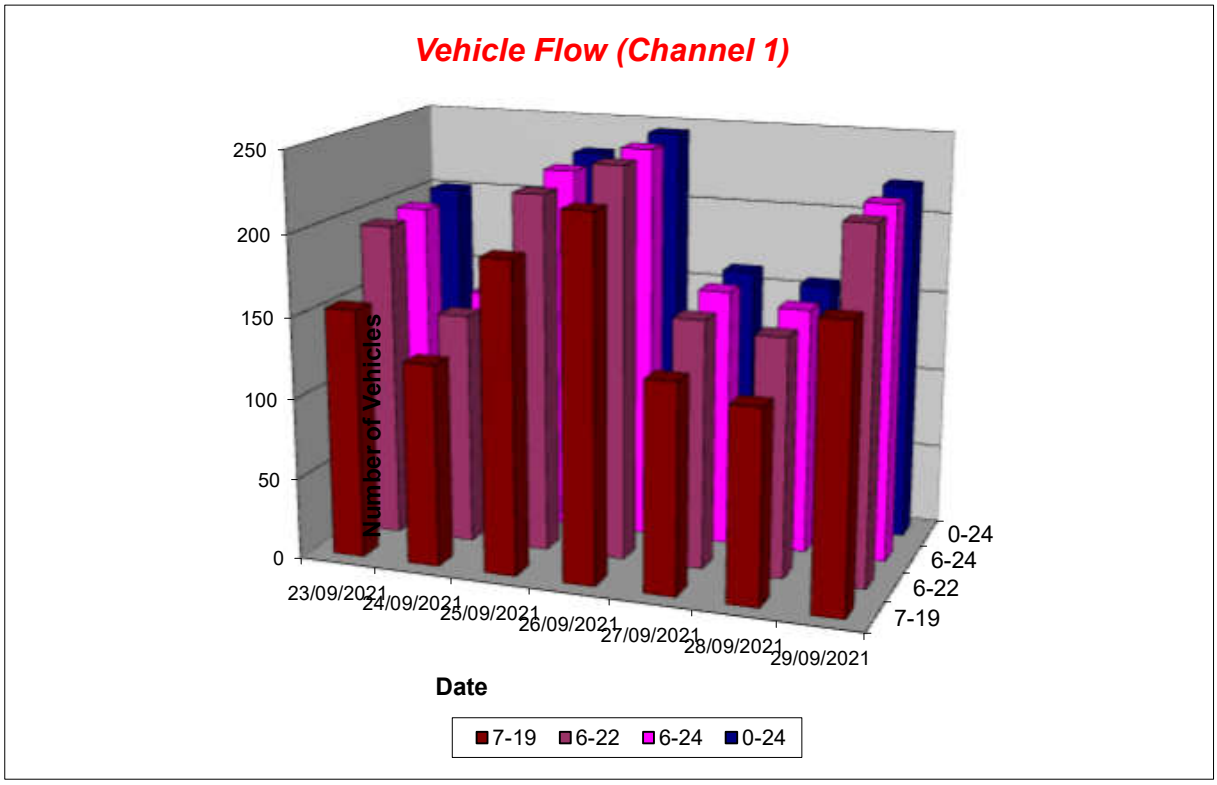
ATC Survey

Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 1 - Northbound | **Vehicle Flow** | **Week 1**

Hr Ending	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5 Day Ave	7 Day Ave
1	0	0	1	2	1	0	0	0	1
2	1	0	1	0	0	0	0	0	0
3	1	0	0	0	0	0	0	0	0
4	0	0	0	0	0	1	0	0	0
5	0	0	0	0	0	1	0	0	0
6	2	1	1	0	1	2	2	2	1
7	3	1	0	1	4	6	3	3	3
8	10	9	4	1	8	7	10	9	7
9	10	13	7	7	14	6	7	10	9
10	16	6	17	37	11	11	11	11	16
11	13	9	5	34	4	5	9	8	11
12	19	12	12	19	4	13	8	11	12
13	5	4	36	21	8	8	8	7	13
14	6	4	22	31	14	9	11	9	14
15	9	12	17	23	12	13	22	14	15
16	18	18	8	17	18	18	24	19	17
17	17	6	33	10	12	7	7	10	13
18	12	14	23	9	14	10	20	14	15
19	19	18	8	14	10	12	36	19	17
20	18	8	14	7	9	10	23	14	13
21	11	4	6	8	8	8	8	8	8
22	9	5	9	2	3	4	10	6	6
23	2	3	0	1	3	3	1	2	2
24	0	0	6	1	3	2	1	1	2
7-19	154	125	192	223	129	119	173	140	159
6-22	195	143	221	241	153	147	217	171	188
6-24	197	146	227	243	159	152	219	175	192
0-24	201	147	230	245	161	156	221	177	194



Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 1 - Northbound **Average Speed** **Week 1**

Hr Ending	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday
1	-	-	5.0	18.0	23.0	-	-
2	18.0	-	23.0	-	-	-	-
3	18.0	-	-	-	-	-	-
4	-	-	-	-	-	13.0	-
5	-	-	-	-	-	13.0	-
6	23.0	18.0	23.0	-	28.0	18.0	11.5
7	17.0	23.0	-	18.0	15.2	23.8	21.3
8	20.0	16.9	21.8	13.0	22.4	17.3	16.2
9	16.0	19.2	18.7	16.1	16.4	20.5	16.1
10	15.1	15.0	19.2	12.8	16.6	15.2	17.5
11	13.8	17.1	18.0	10.1	19.2	16.0	14.6
12	17.7	16.8	18.0	12.0	16.8	15.1	15.5
13	10.8	18.0	16.4	13.9	18.6	13.9	14.5
14	20.5	14.8	15.5	11.3	17.3	14.3	15.9
15	13.8	18.8	13.2	10.9	17.2	18.3	14.8
16	18.8	17.3	11.9	15.8	19.1	15.6	15.1
17	19.2	17.2	14.7	15.2	17.2	18.0	22.3
18	15.8	16.0	14.5	15.4	17.6	16.7	16.8
19	17.8	16.9	14.5	16.4	19.0	17.6	15.2
20	16.1	15.5	16.7	20.1	15.4	14.9	16.0
21	16.4	16.8	17.2	20.5	18.6	13.5	18.0
22	16.0	19.0	17.7	16.5	19.7	18.0	16.2
23	18.0	21.3	-	5.0	16.3	18.0	23.0
24	-	-	21.3	18.0	24.7	9.0	23.0
10-12	16.2	16.9	18.0	10.8	18.0	15.3	15.0
14-16	17.1	17.9	12.8	13.0	18.3	16.7	15.0
0-24	16.9	17.3	16.1	13.3	18.0	16.4	16.1

7 Day Ave	16.3

85th Percentile

Hr Ending	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday
1	-	-	5.6	18.2	23.7	-	-
2	18.7	-	23.1	-	-	-	-
3	18.5	-	-	-	-	-	-
4	-	-	-	-	-	13.4	-
5	-	-	-	-	-	13.1	-
6	23.6	18.6	23.1	-	28.5	23.8	18.7
7	28.3	23.5	-	18.6	28.5	28.5	28.9
8	23.3	23.3	28.8	13.1	28.5	18.8	18.5
9	18.8	23.6	28.3	23.5	18.4	23.6	18.1
10	23.0	23.6	23.0	13.9	23.4	23.8	18.8
11	18.8	23.3	23.3	13.3	23.3	18.0	18.4
12	23.8	18.3	23.4	13.8	23.1	18.2	18.5
13	18.7	23.8	23.3	18.4	23.2	18.1	18.5
14	23.0	18.8	23.9	13.3	24.0	18.1	23.2
15	18.4	23.6	24.0	13.9	18.1	23.3	18.3
16	23.9	24.0	18.4	23.6	23.4	18.1	18.1
17	23.8	23.9	18.3	18.6	23.4	18.0	28.6
18	23.4	18.2	18.2	23.4	18.5	18.5	23.2
19	24.0	23.7	18.2	23.1	23.2	23.7	18.9
20	18.9	19.0	23.6	23.6	18.5	18.5	23.1
21	23.1	23.2	18.4	23.7	23.3	18.8	23.4
22	23.9	23.5	23.4	28.9	23.6	18.1	23.3
23	23.4	28.1	-	5.8	18.5	23.2	23.9
24	-	-	23.7	18.0	28.2	13.7	23.8
10-12	23.5	24.0	23.3	13.5	23.9	18.5	18.3
14-16	23.8	23.7	23.6	18.9	23.7	23.4	18.7
0-24	23.1	23.0	23.2	18.4	23.5	23.1	23.3

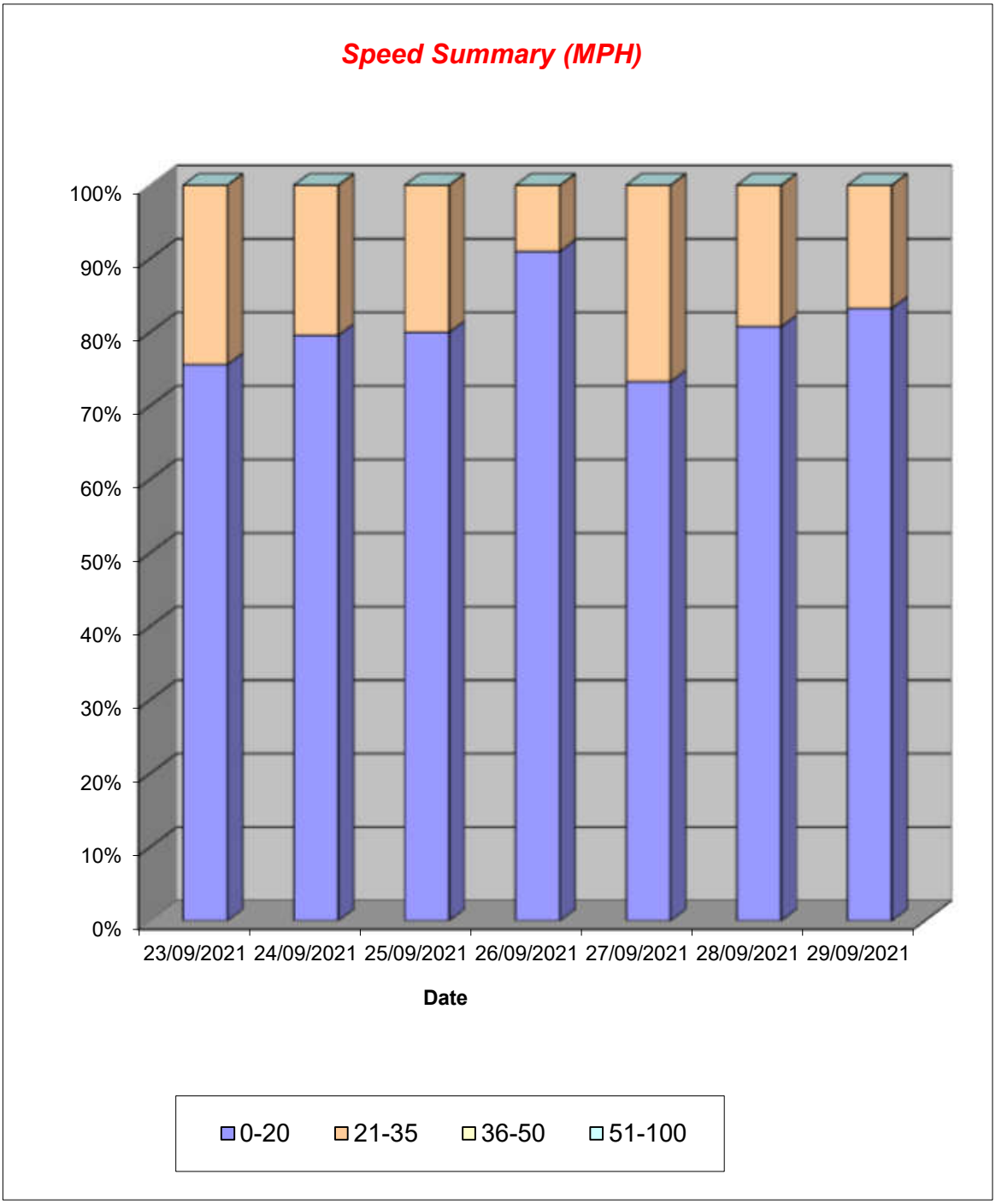
7 Day Ave	22.5

Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 1 - Northbound **Speed Summary** **Week 1**

Speed (MPH)	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday
0-20	152	117	184	223	118	126	184
21-35	49	30	46	22	43	30	37
36-50	0	0	0	0	0	0	0
51-100	0	0	0	0	0	0	0
TOTAL	**201**	**147**	**230**	**245**	**161**	**156**	**221**



Sandyleaze, Gloucester ATC

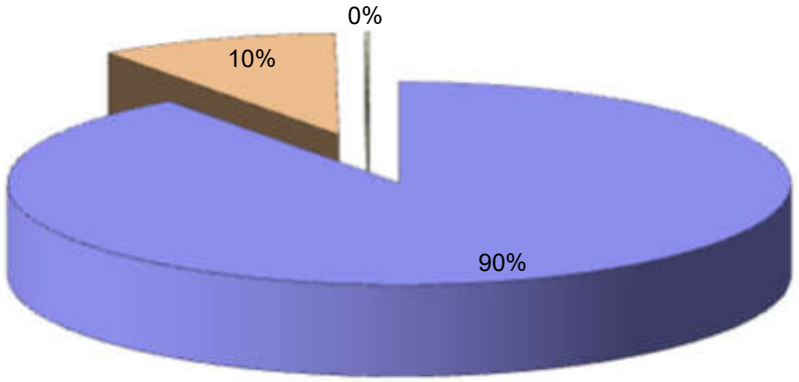
Produced by Streetwise Services Ltd.

Channel 1 - Northbound **Vehicle Class** **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
23/09/2021				
7-19	131	23	0	154
6-22	170	25	0	195
6-24	172	25	0	197
0-24	175	26	0	201
24/09/2021				
7-19	114	10	1	125
6-22	129	13	1	143
6-24	132	13	1	146
0-24	133	13	1	147
25/09/2021				
7-19	175	17	0	192
6-22	201	20	0	221
6-24	207	20	0	227
0-24	210	20	0	230
26/09/2021				
7-19	207	15	1	223
6-22	223	17	1	241
6-24	225	17	1	243
0-24	227	17	1	245
27/09/2021				
7-19	114	15	0	129
6-22	137	16	0	153
6-24	142	17	0	159
0-24	144	17	0	161
28/09/2021				
7-19	105	14	0	119
6-22	131	16	0	147
6-24	136	16	0	152
0-24	139	17	0	156
29/09/2021				
7-19	153	20	0	173
6-22	193	24	0	217
6-24	195	24	0	219
0-24	197	24	0	221

Average				
7-19	143	16	0	159
6-22	169	19	0	188
6-24	173	19	0	192
0-24	175	19	0	194

Total Vehicle Class Distribution

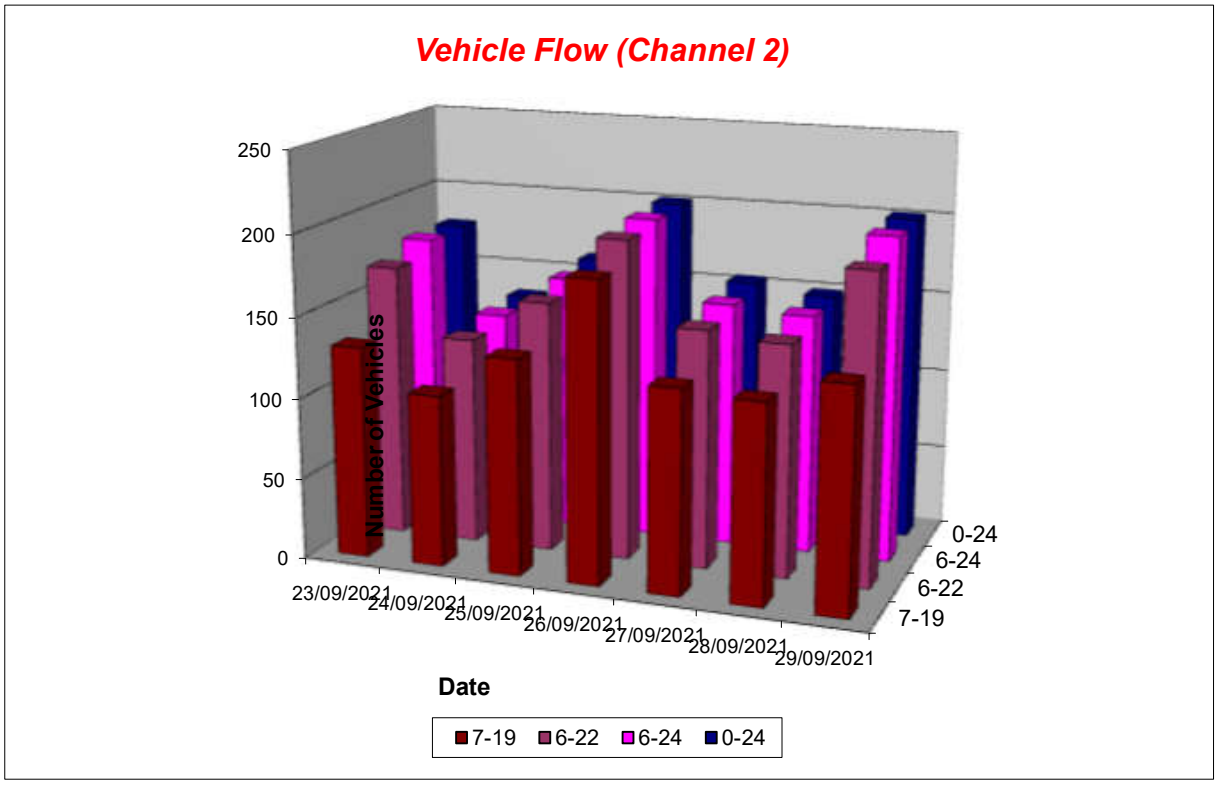


Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 2 - Southbound | **Vehicle Flow** | **Week 1**

Hr Ending	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5 Day Ave	7 Day Ave
1	0	0	1	0	1	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	1	1	0	1	1	0	1
5	0	1	0	0	1	0	0	0	0
6	0	0	0	0	1	0	0	0	0
7	2	3	1	1	5	2	4	3	3
8	6	4	4	3	7	6	11	7	6
9	15	17	4	3	16	11	16	15	12
10	8	5	15	8	9	13	8	9	9
11	9	3	6	20	3	9	10	7	9
12	4	8	10	23	10	5	5	6	9
13	9	6	14	17	11	11	6	9	11
14	6	8	22	27	9	6	6	7	12
15	10	10	7	23	4	12	10	9	11
16	15	25	6	23	18	13	17	18	17
17	22	8	16	18	16	11	16	15	15
18	11	5	16	8	9	11	16	10	11
19	16	7	13	11	13	14	16	13	13
20	15	10	12	5	5	5	22	11	11
21	16	5	6	3	8	11	14	11	9
22	5	4	3	4	4	3	13	6	5
23	2	1	0	2	1	1	3	2	1
24	6	3	4	1	3	4	7	5	4
7-19	131	106	133	184	125	122	137	124	134
6-22	169	128	155	197	147	143	190	155	161
6-24	177	132	159	200	151	148	200	162	167
0-24	177	133	161	201	154	149	201	163	168



Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 2 - Southbound **Average Speed** **Week 1**

Hr Ending	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday
1	-	-	13.0	-	18.0	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	5.0	18.0	-	5.0	23.0
5	-	23.0	-	-	28.0	-	-
6	-	-	-	-	13.0	-	-
7	23.0	18.0	18.0	18.0	22.0	25.5	18.0
8	20.5	18.0	19.8	15.3	19.4	18.8	18.5
9	21.0	21.8	23.0	16.3	21.8	22.1	22.1
10	19.2	17.4	18.5	13.5	17.3	15.2	19.5
11	20.1	21.3	21.3	14.2	19.7	20.8	18.5
12	20.5	15.1	16.5	9.3	21.5	18.0	17.0
13	22.4	23.0	21.2	14.5	19.5	15.2	16.2
14	21.3	18.9	14.0	11.2	16.8	17.2	17.2
15	18.5	22.5	13.1	9.5	23.0	17.8	18.7
16	20.3	19.6	20.0	9.0	19.7	18.8	17.9
17	20.1	18.6	16.1	11.7	17.8	18.6	21.8
18	21.8	25.0	15.9	17.0	17.7	20.0	20.3
19	20.8	22.3	18.5	22.1	18.3	19.6	16.9
20	18.0	20.0	18.0	20.0	15.4	22.0	14.6
21	14.5	18.0	21.3	21.3	14.8	21.4	19.1
22	19.0	20.5	23.0	14.8	26.8	16.3	15.8
23	20.5	18.0	-	14.0	5.0	28.0	24.7
24	11.7	18.7	19.2	33.0	16.3	11.5	11.9
10-12	20.2	16.8	18.3	11.5	21.1	19.8	18.0
14-16	19.6	20.4	16.3	9.2	20.3	18.3	18.2
0-24	19.5	20.1	17.6	12.9	19.0	18.7	18.2
						7 Day Ave	18.0

85th Percentile

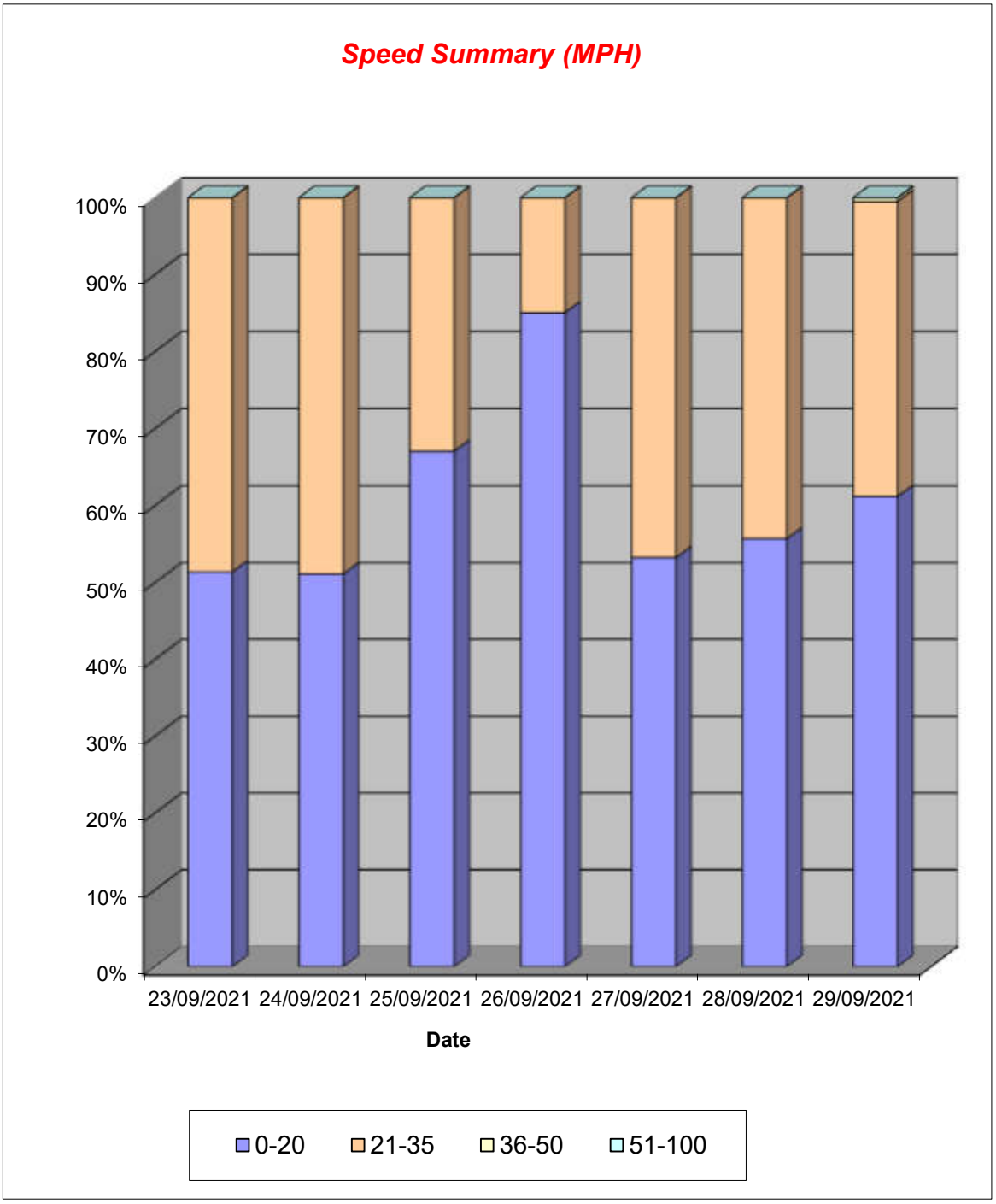
Hr Ending	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday
1	-	-	13.5	-	18.5	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	5.4	18.4	-	5.9	23.7
5	-	24.0	-	-	28.6	-	-
6	-	-	-	-	13.2	-	-
7	23.1	23.1	18.7	18.9	23.5	28.1	23.4
8	28.0	23.9	28.2	23.5	28.7	23.6	23.7
9	23.3	28.6	28.4	23.2	28.8	23.3	23.1
10	23.8	23.3	23.5	18.7	23.4	18.1	28.8
11	28.3	23.1	33.8	18.7	23.9	23.2	23.7
12	23.2	18.5	18.5	13.6	23.7	23.1	18.5
13	23.5	23.2	28.4	23.8	28.1	23.4	28.2
14	28.3	24.0	18.5	18.2	23.6	24.0	23.2
15	23.3	23.1	23.2	13.8	23.7	23.5	23.3
16	23.0	23.0	33.6	13.2	23.0	23.5	23.8
17	23.5	23.3	18.5	19.0	23.4	24.0	28.1
18	28.2	33.5	23.7	23.1	23.4	23.2	28.5
19	23.9	23.9	23.9	28.1	28.3	23.4	23.8
20	23.6	28.5	23.4	28.8	24.0	28.4	23.8
21	18.8	23.4	23.3	23.4	18.8	28.3	23.3
22	23.9	28.8	23.3	23.5	33.7	23.5	24.0
23	23.3	18.8	-	23.1	5.4	28.1	33.8
24	13.5	28.7	23.2	33.1	23.7	23.5	13.7
10-12	28.1	23.7	23.5	18.2	23.3	24.0	23.9
14-16	23.6	24.0	23.2	13.0	23.4	23.6	23.9
0-24	23.4	23.3	23.6	23.7	23.4	23.9	23.4
						7 Day Ave	23.5

Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 2 - Southbound **Speed Summary** **Week 1**

Speed (MPH)	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday
0-20	91	68	108	171	82	83	123
21-35	86	65	53	30	72	66	77
36-50	0	0	0	0	0	0	1
51-100	0	0	0	0	0	0	0
TOTAL	**177**	**133**	**161**	**201**	**154**	**149**	**201**



Sandyleaze, Gloucester ATC

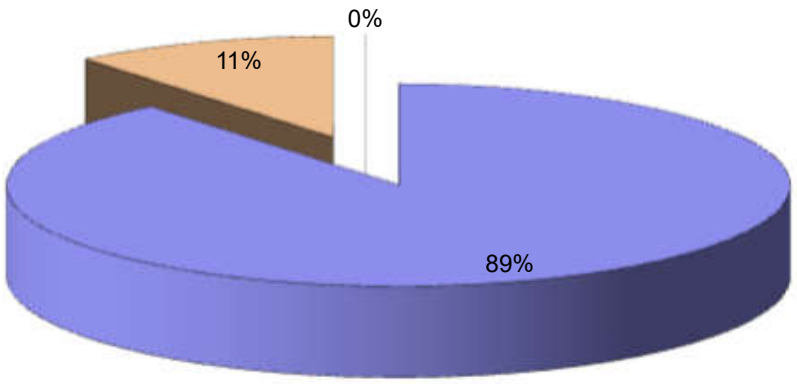
Produced by Streetwise Services Ltd.

Channel 2 - Southbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
23/09/2021				
7-19	115	16	0	131
6-22	152	17	0	169
6-24	159	18	0	177
0-24	159	18	0	177
24/09/2021				
7-19	99	7	0	106
6-22	121	7	0	128
6-24	125	7	0	132
0-24	125	8	0	133
25/09/2021				
7-19	120	13	0	133
6-22	140	15	0	155
6-24	144	15	0	159
0-24	146	15	0	161
26/09/2021				
7-19	177	7	0	184
6-22	190	7	0	197
6-24	193	7	0	200
0-24	194	7	0	201
27/09/2021				
7-19	101	24	0	125
6-22	120	27	0	147
6-24	123	28	0	151
0-24	124	30	0	154
28/09/2021				
7-19	102	20	0	122
6-22	119	24	0	143
6-24	124	24	0	148
0-24	125	24	0	149
29/09/2021				
7-19	115	22	0	137
6-22	165	25	0	190
6-24	175	25	0	200
0-24	175	26	0	201

Average				
7-19	118	16	0	134
6-22	144	17	0	161
6-24	149	18	0	167
0-24	150	18	0	168

Total Vehicle Class Distribution



Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 1 - Northbound

	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	201	147	230	245	161	156	221	177	194
Mean Speed	16.9	17.3	16.1	13.3	18.0	16.4	16.1	16.9	16.3
85%ile Speed	23.1	23.0	23.2	18.4	23.5	23.1	23.3	23.2	22.5
No. Vehicles > 30 MPH Limit	0	0	1	0	0	0	0	0	0
% Vehicles > 30 MPH Limit	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.1
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Channel 2 - Southbound

	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	177	133	161	201	154	149	201	163	168
Mean Speed	19.5	20.1	17.6	12.9	19.0	18.7	18.2	19.1	18.0
85%ile Speed	23.4	23.3	23.6	23.7	23.4	23.9	23.4	23.5	23.5
No. Vehicles > 30 MPH Limit	2	3	2	2	3	0	2	2	2
% Vehicles > 30 MPH Limit	1.1	2.3	1.2	1.0	1.9	0.0	1.0	1.3	1.2
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Channels 1+2 - Northbound & Southbound

	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5-DAY MEAN	7-DAY MEAN
0000-2400 Vehicle Flow	378	280	391	446	315	305	422	340	362
Mean Speed	18.2	18.7	16.9	13.1	18.5	17.6	17.2	18.0	17.2
85%ile Speed	23.3	23.1	23.4	21.1	23.4	23.5	23.3	23.3	23.0
No. Vehicles > 30 MPH Limit	2	3	3	2	3	0	2	2	2
% Vehicles > 30 MPH Limit	0.5	1.1	0.8	0.4	1.0	0.0	0.5	0.6	0.6
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Class No	Vehicle Description	Class No	Vehicle Description
1	Car, Light Van, Taxi	5	Rigid 2 Axle HGV + 2 Axle (Close coupled) Trailer
1	Light Goods Vehicle	6	Rigid 3 Axle HGV + 2 Axle Drawbar Trailer
1	Car or Light Goods Vehicle + 1 Axle Caravan or Trailer	6	Rigid 3 Axle HGV + 3 Axle Drawbar Trailer
1	Car or Light Goods Vehicle + 2 Axle Caravan or Trailer	7	Artic, 2 Axle Tractor + 1 Axle Semi-Trailer
2	Rigid 2 Axle Heavy Goods Vehicle	8	Artic, 2 Axle Tractor + 2 Axle Semi-Trailer
3	Rigid 3 Axle Heavy Goods Vehicle	9	Artic, 2 Axle Tractor + 3 Axle Semi-Trailer
3	Rigid 3 Axle Heavy Goods Vehicle	10	Artic, 3 Axle Tractor + 1 Axle Semi-Trailer
4	Rigid 4 Axle Heavy Goods Vehicle	10	Artic, 3 Axle Tractor + 2 Axle Semi-Trailer
4	Rigid 4 Axle Heavy Goods Vehicle	11	Artic, 3 Axle Tractor + 3 Axle Semi-Trailer
5	Rigid 2 Axle HGV + 2 Axle Drawbar Trailer	12	Bus or Coach, 2 Axle
5	Rigid 2 Axle HGV + 3 Axle Drawbar Trailer	12	Bus or Coach, 3 Axle
5	Rigid 2 Axle HGV + 1 Axle Caravan or Trailer	13	Vehicle with 7 or more Axles

Sandyleaze, Gloucester ATC

Produced by Streetwise Services Ltd.

Channel 1 - Northbound

	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5-DAY MEAN	7-DAY MEAN
Vehicle Flow	152	105	163	218	113	126	177	135	151
Mean Speed	16.9	17.7	16.7	14.6	19.0	15.7	16.8	17.2	16.8
85%ile Speed	22.0	22.5	21.2	18.0	23.4	19.6	21.2	21.7	21.1
No. Vehicles > 30 MPH Limit	0	0	1	0	0	0	0	0	0
% Vehicles > 30 MPH Limit	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Channel 2 - Southbound

	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5-DAY MEAN	7-DAY MEAN
Vehicle Flow	123	99	121	169	106	110	142	116	124
Mean Speed	19.3	19.8	17.4	16.2	18.5	18.2	17.9	18.7	18.2
85%ile Speed	23.1	23.8	22.3	21.2	22.8	23.2	23.9	23.4	22.9
No. Vehicles > 30 MPH Limit	1	0	2	2	3	0	2	1	1
% Vehicles > 30 MPH Limit	0.8	0.0	1.7	1.2	2.8	0.0	1.4	1.0	1.1
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Channels 1+2 - Northbound & Southbound

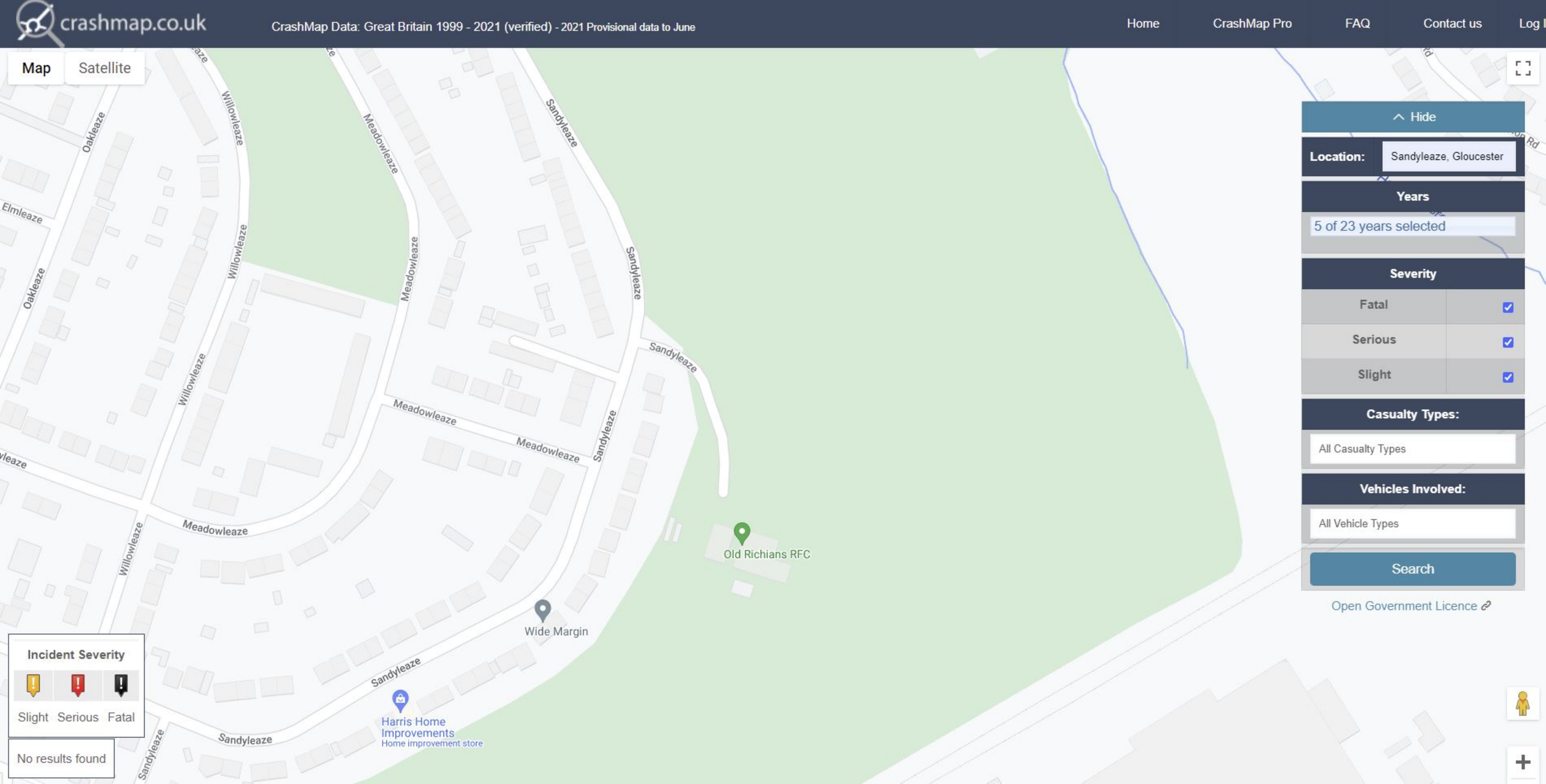
	23/09/2021 Thursday	24/09/2021 Friday	25/09/2021 Saturday	26/09/2021 Sunday	27/09/2021 Monday	28/09/2021 Tuesday	29/09/2021 Wednesday	5-DAY MEAN	7-DAY MEAN
Vehicle Flow	275	204	284	387	219	236	319	251	275
Mean Speed	18.1	18.7	17.0	15.4	18.8	16.9	17.4	18.0	17.5
85%ile Speed	22.6	23.2	21.8	19.6	23.1	21.4	22.6	22.5	22.0
No. Vehicles > 30 MPH Limit	1	0	3	2	3	0	2	1	2
% Vehicles > 30 MPH Limit	0.4	0.0	1.1	0.5	1.4	0.0	0.6	0.5	0.6
No. Vehicles > 45 MPH	0	0	0	0	0	0	0	0	0
% Vehicles > 45 MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: All figures are based on data from the hours 0000-0700, 0900-1600 & 1800-2400.

COTSWOLD
TRANSPORT
PLANNING

Appendix C

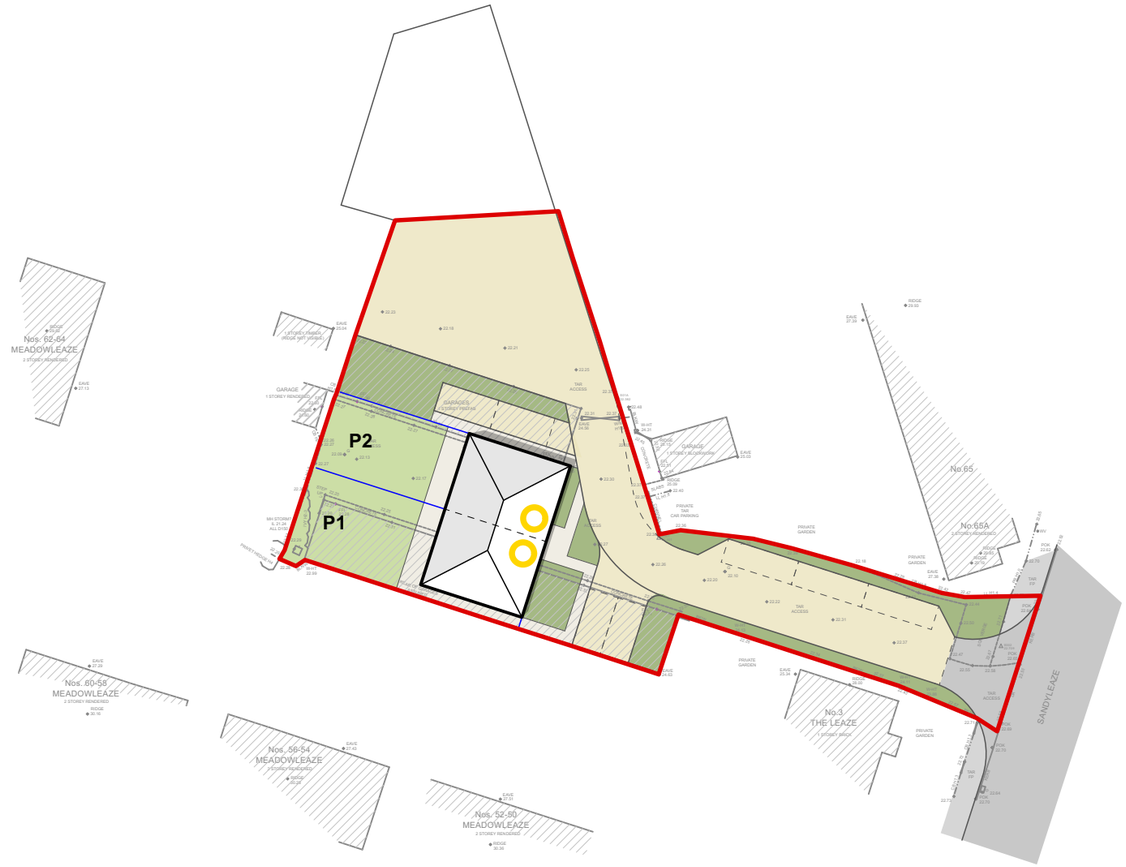
CrashMap Personal Injury
Collision Data Map Extract


crashmap.co.uk
CrashMap Data: Great Britain 1999 - 2021 (verified) - 2021 Provisional data to June
Home
CrashMap Pro
FAQ
Contact us
Log I
Map
Satellite
Hide
Location:
Sandyleaze, Gloucester
Years
5 of 23 years selected
Severity
Fatal
Serious
Slight
Casualty Types:
All Casualty Types
Vehicles Involved:
All Vehicle Types
Search
Open Government Licence
Oakleaze
Willowleaze
Meadowleaze
Sandyleaze
Elmleaze
Old Richians RFC
Wide Margin
Harris Home Improvements
Home improvement store
Incident Severity
Slight
Serious
Fatal
No results found

COTSWOLD
TRANSPORT
PLANNING

Appendix D

Architect's Site Layout Plan



Key

- Site boundary
- Road
- Footpath
- Paving
- Access Road
- Parking space
- Planted areas
- Private gardens
- Proposed trees
- Close board timber fencing

Schedule of accommodation

2no 1Bed 2Person
Bungalows @ 50sqm

Total: 2no Units

N

0 5 20
2 10 50m

www.quattrodesign.co.uk

NOTES

REVISIONS

REV. DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Proposed Site Layout

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE 1:500@A3

DATE Mar 2022

Quattro designarchitects

DRAWING NO. **REV**

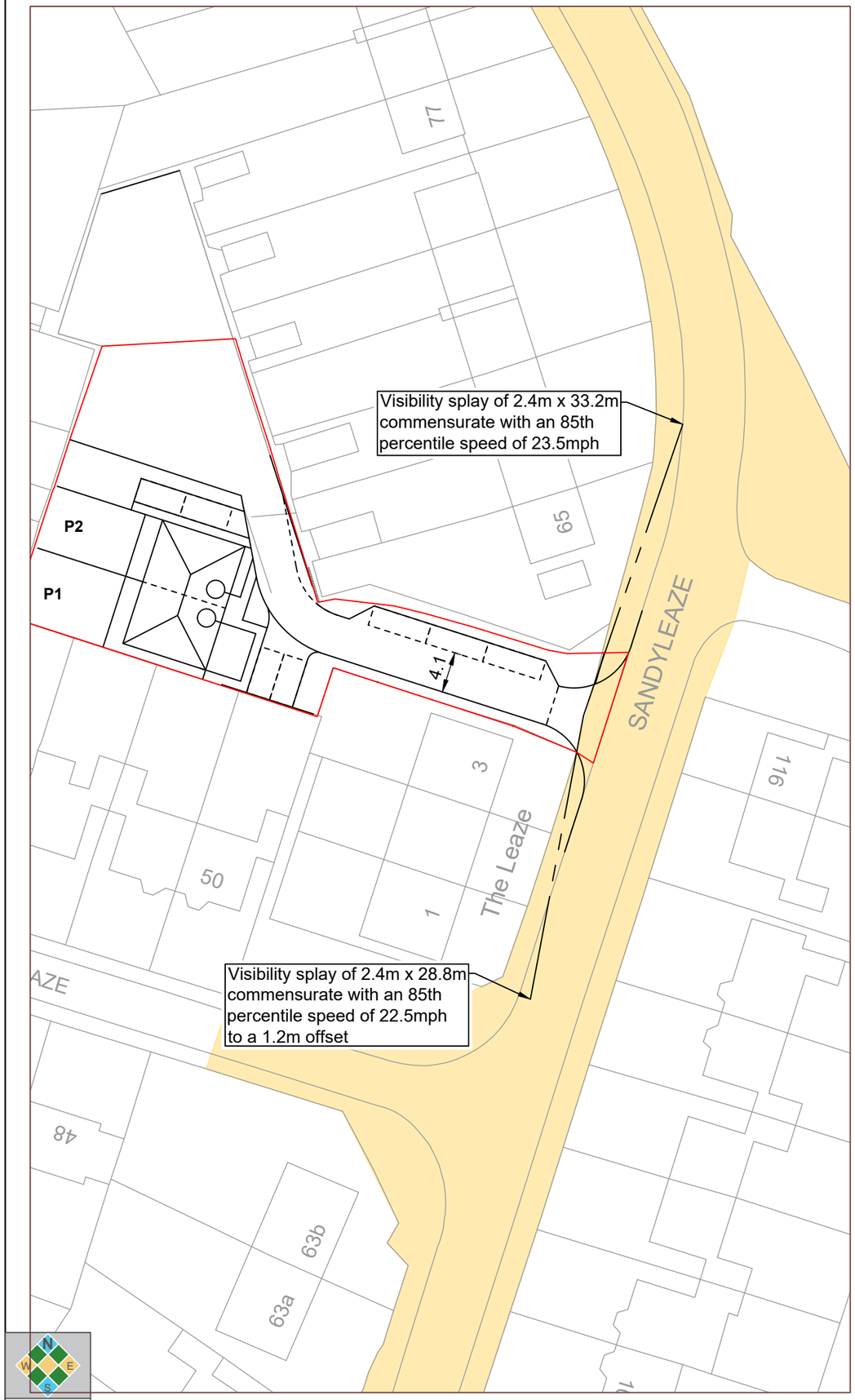
6614-P-100 **-**

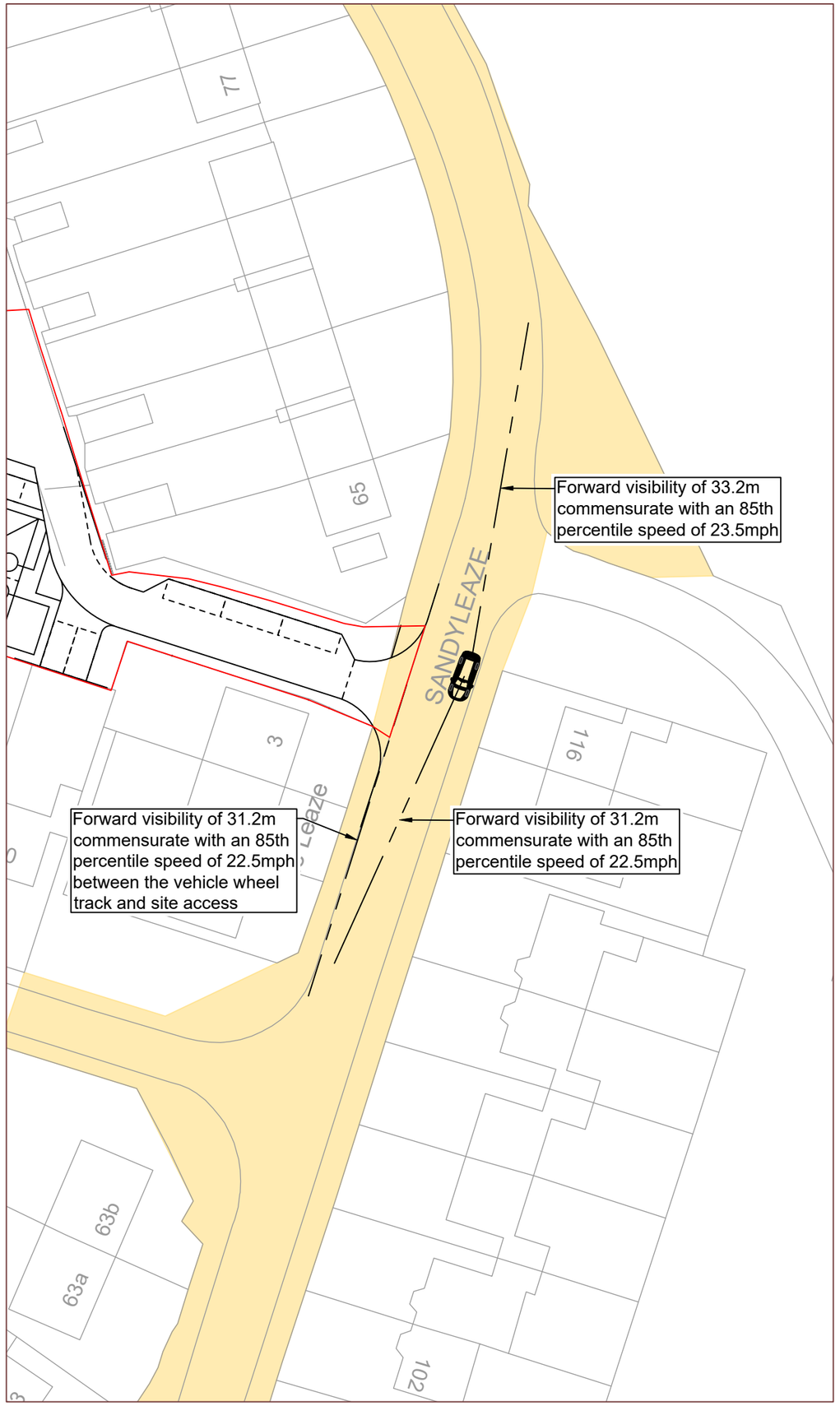
Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY [redacted]

COTSWOLD
TRANSPORT
PLANNING

Appendix E

Visibility Splay Assessment -
2m 'x' Distance





Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. This drawing is based on the Architects layout and OS mapping received from Quattro Design Architects on 01.04.22.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.

Extent of adopted highway obtained from Gloucestershire County Council.

Application site boundary provided by Quattro Design Architects.

Rev	Date	Details	Drawn by	Checked by
C	12.04.22	Revised Site Layout	MW	MG
B	04.02.22	Revised Site Layout	MW	MG
A	05.10.21	Updated Visibility Splays based on 85th Percentile Speeds	MW	MG

COTSWOLD TRANSPORT PLANNING

CLIENT:
Gloucester City Homes

PROJECT:
Sandyleaze, Gloucester

TITLE:
Visibility Splay Assessment - 2.4m 'x' Distance

STATUS:
INFORMATION

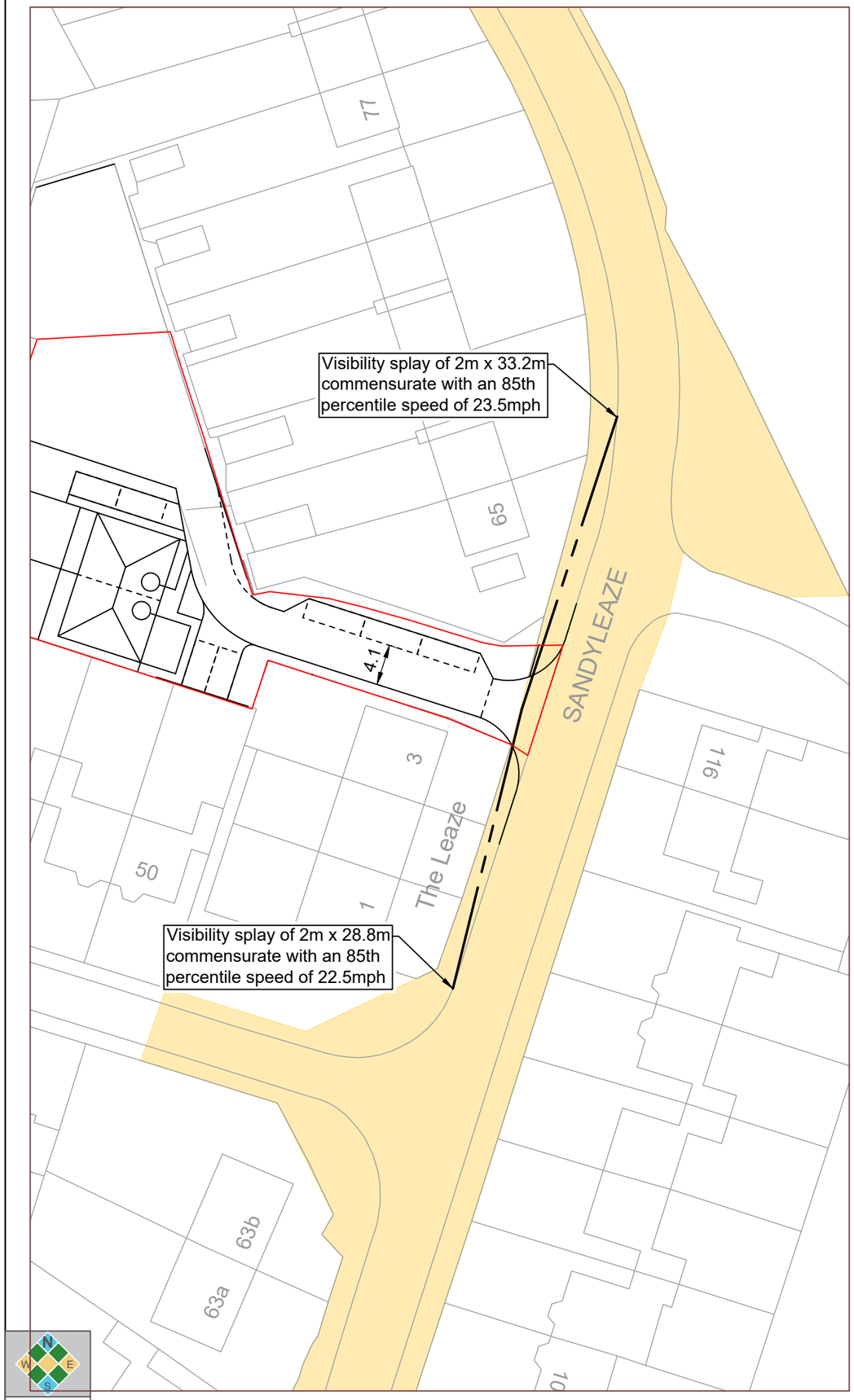
SCALE @ A3:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:500	16.09.21	MW	MG	MG

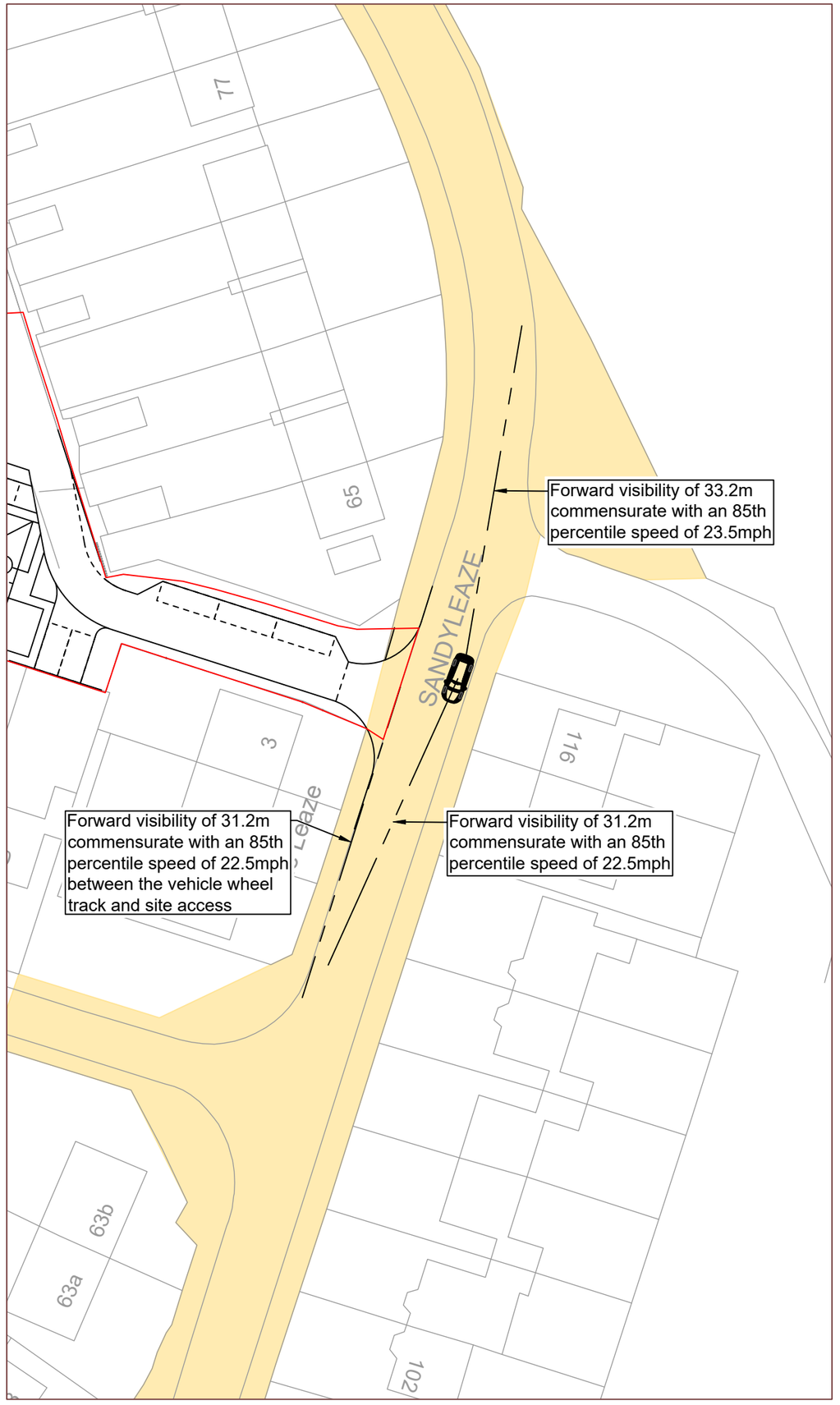
JOB NO:	DRAWING NO:	REVISION:
21-0554	SK01-1	C

COTSWOLD
TRANSPORT
PLANNING

Appendix F

Visibility Splay Assessment -
2.4m 'x' distance





INDICATIVE

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. This drawing is based on the Architects layout and OS mapping received from Quattro Design Architects on 01.04.22.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.

Extent of adopted highway obtained from Gloucestershire County Council.

Application site boundary provided by Quattro Design Architects.

Rev	Date	Details	Drawn by	Checked by
C	12.04.22	Revised Site Layout	MW	MG
B	04.02.22	Revised Site Layout	MW	MG
A	05.10.21	Updated Visibility Splays based on 85th Percentile Speeds	MW	MG

COTSWOLD TRANSPORT PLANNING

CLIENT:
Gloucester City Homes

PROJECT:
Sandyleaze, Gloucester

TITLE:
Visibility Splay Assessment - 2m 'x' Distance

STATUS:
INFORMATION

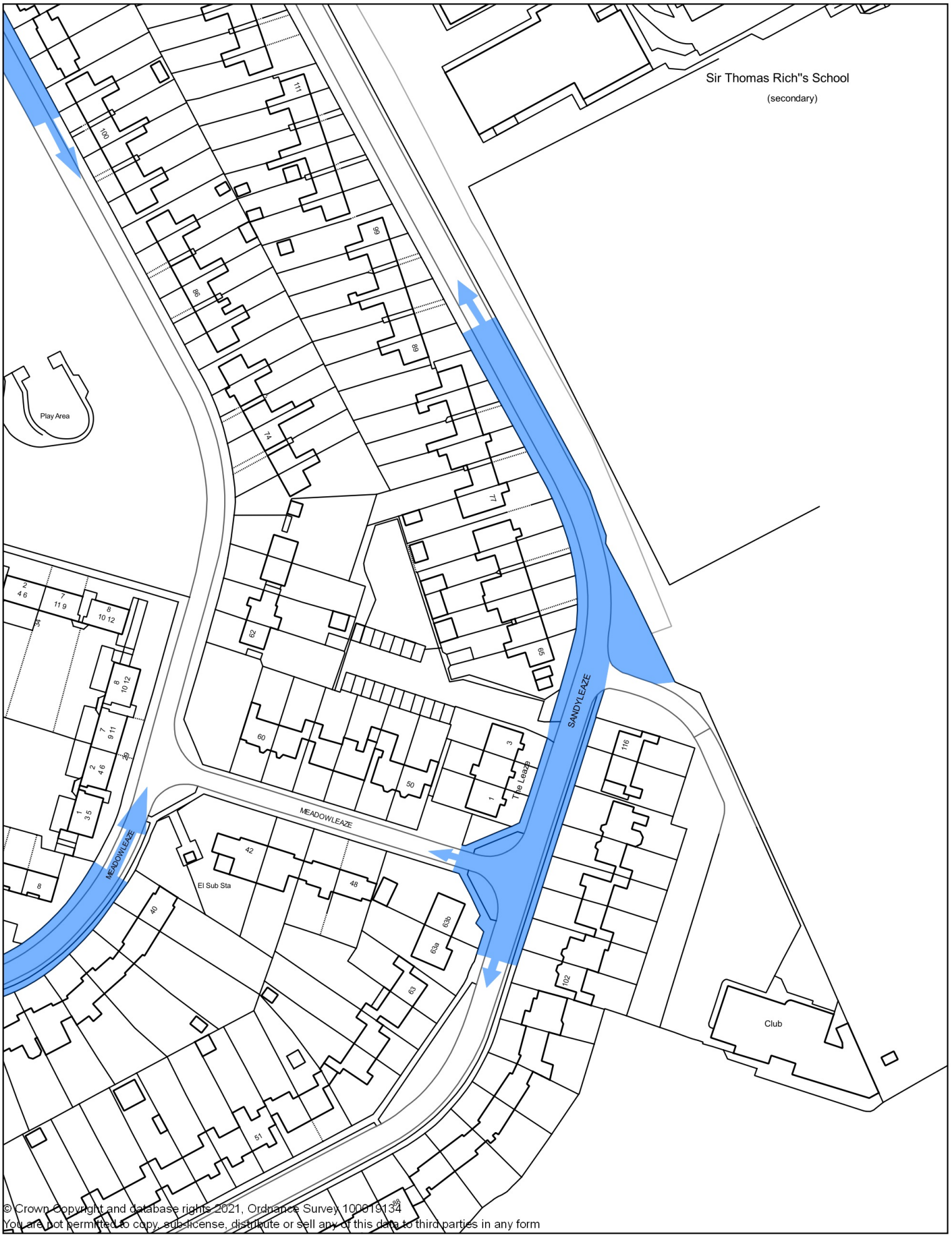
SCALE @ A3:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:500	16.09.21	MW	MG	MG

JOB NO:	DRAWING NO:	REVISION:
21-0554	SK01-2	C

COTSWOLD
TRANSPORT
PLANNING

Appendix G

Adopted Highway Boundary



Scale @A4: 1:1250

DATE: 08/09/2021

Please refer to the accompanying written material for an explanation of the information shown. Please also note that the publicly maintainable highway boundary has been marked in accordance with records examined by Glos. County Council, and in the absence of evidence to the contrary.

GCC

N

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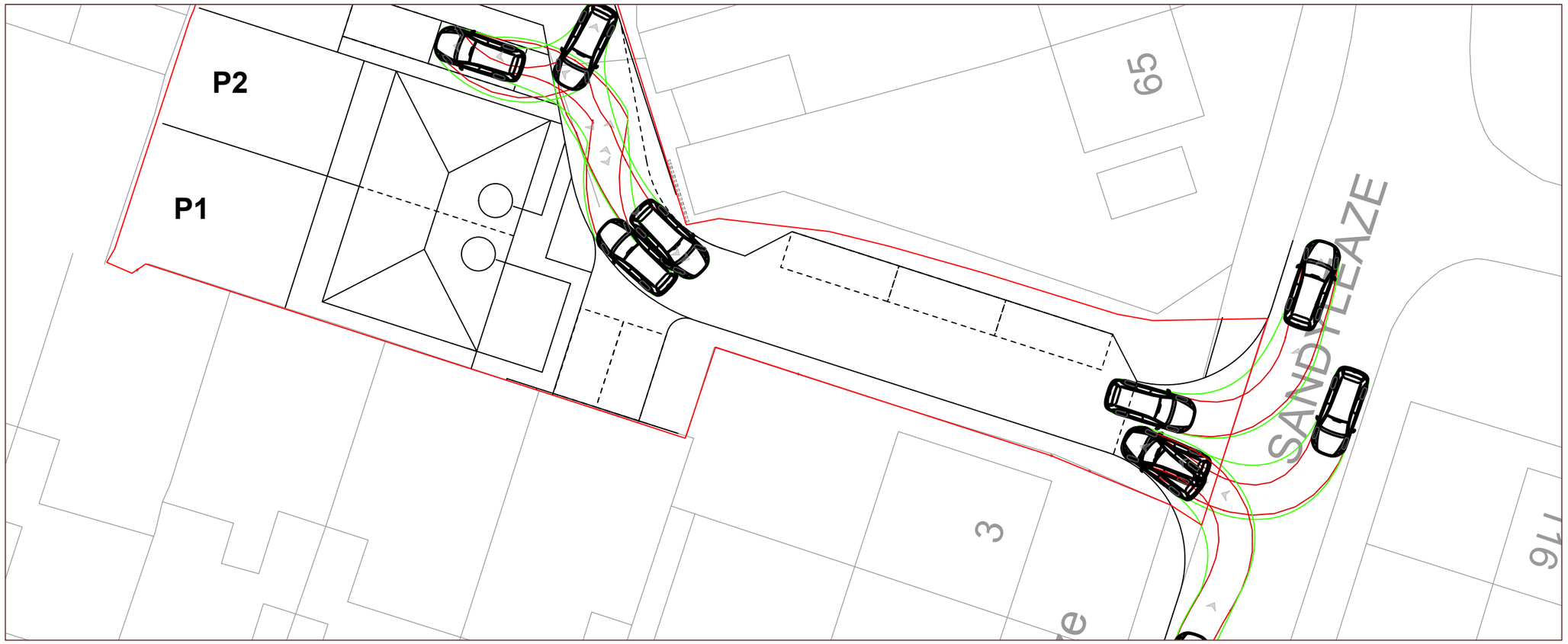
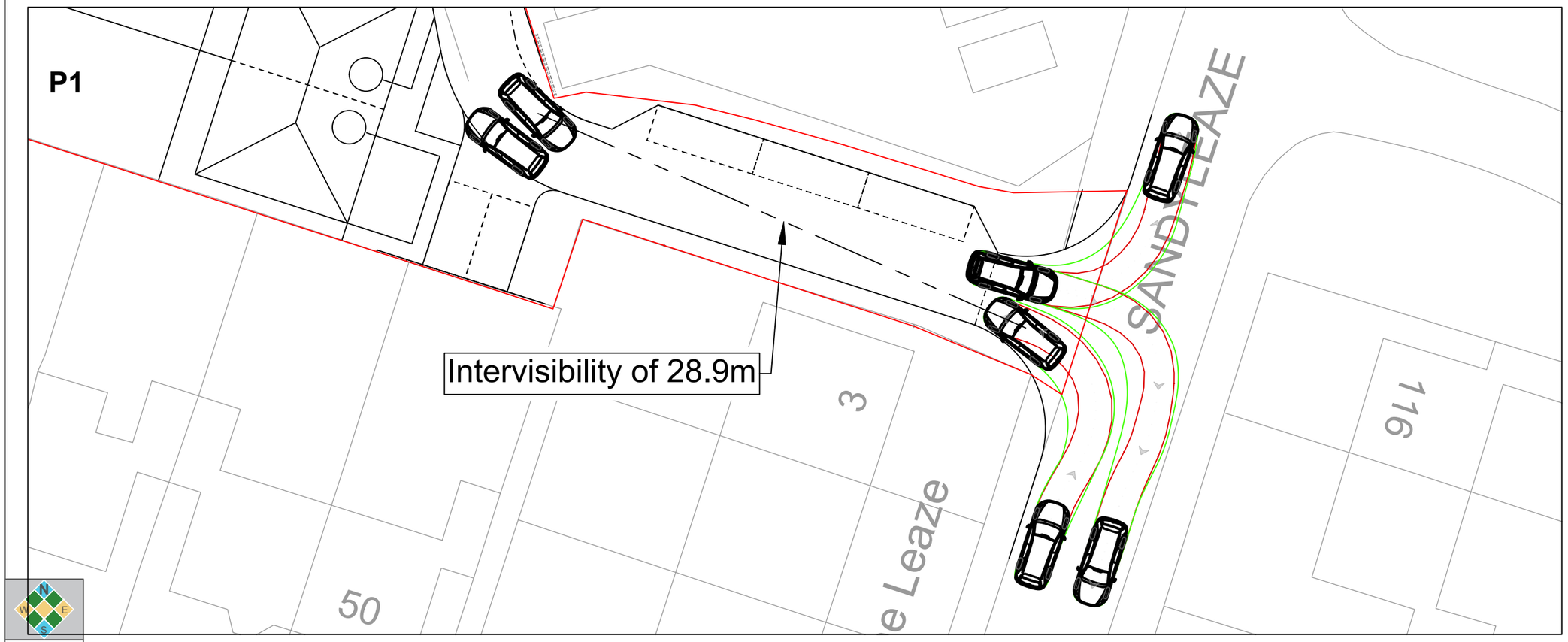
Appendix H

Swept Path Analysis - Estate Car



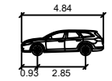


INDICATIVE

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. This drawing is based on the Architects layout and OS mapping received from Quattro Design Architects on 01.04.22.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.

Application site boundary provided by Quattro Design Architects.



2012 Ford Mondeo Wagon

	meters
Width	: 1.89
Track	: 1.89
Lock to Lock Time	: 6.0
Steering Angle	: 34.7

Rev	Date	Details	Drawn by	Checked by
B	19.04.22	Revised Site Layout	MW	MG
A	04.02.22	Revised Site Layout	MW	MG

COTSWOLD TRANSPORT PLANNING

CLIENT:
Gloucester City Homes

PROJECT:
Sandyleaze, Gloucester

TITLE:
Swept Path Analysis - Estate Car

STATUS:
INFORMATION

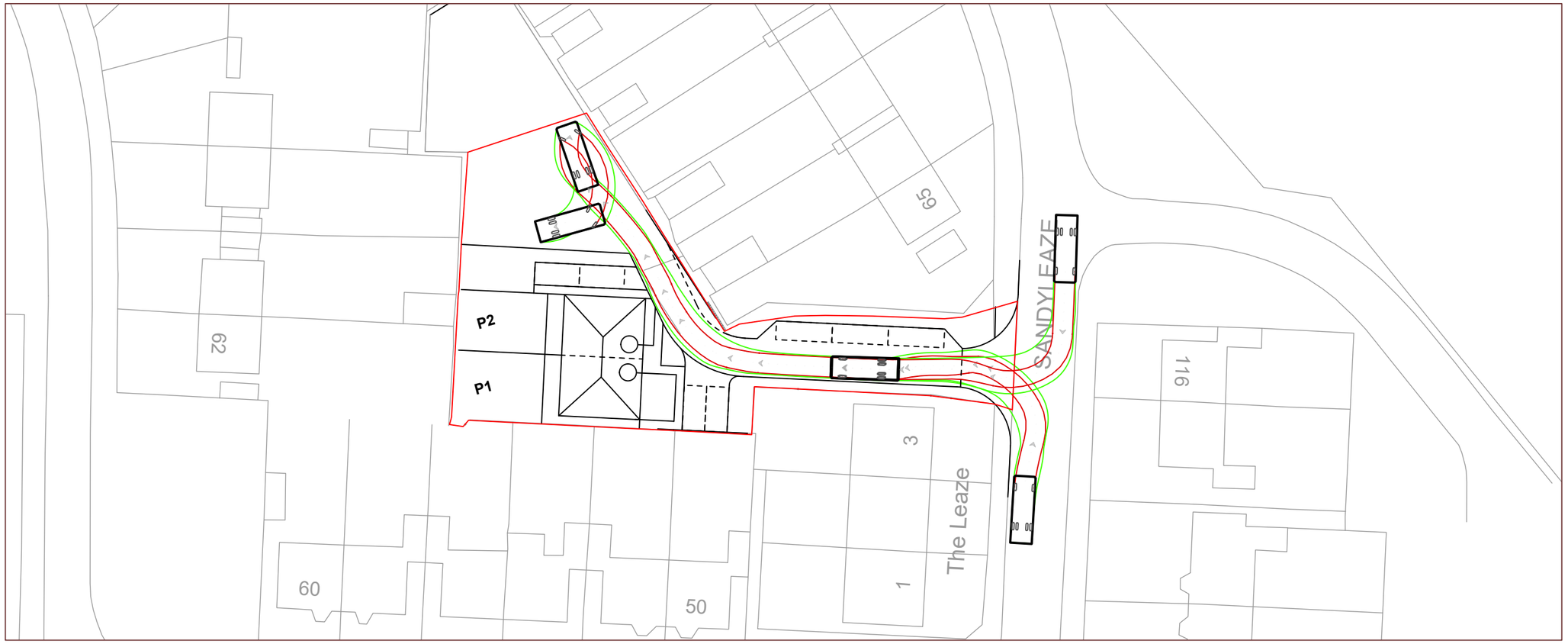
SCALE @ A3:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:250	13.10.21	MW	MG	MG

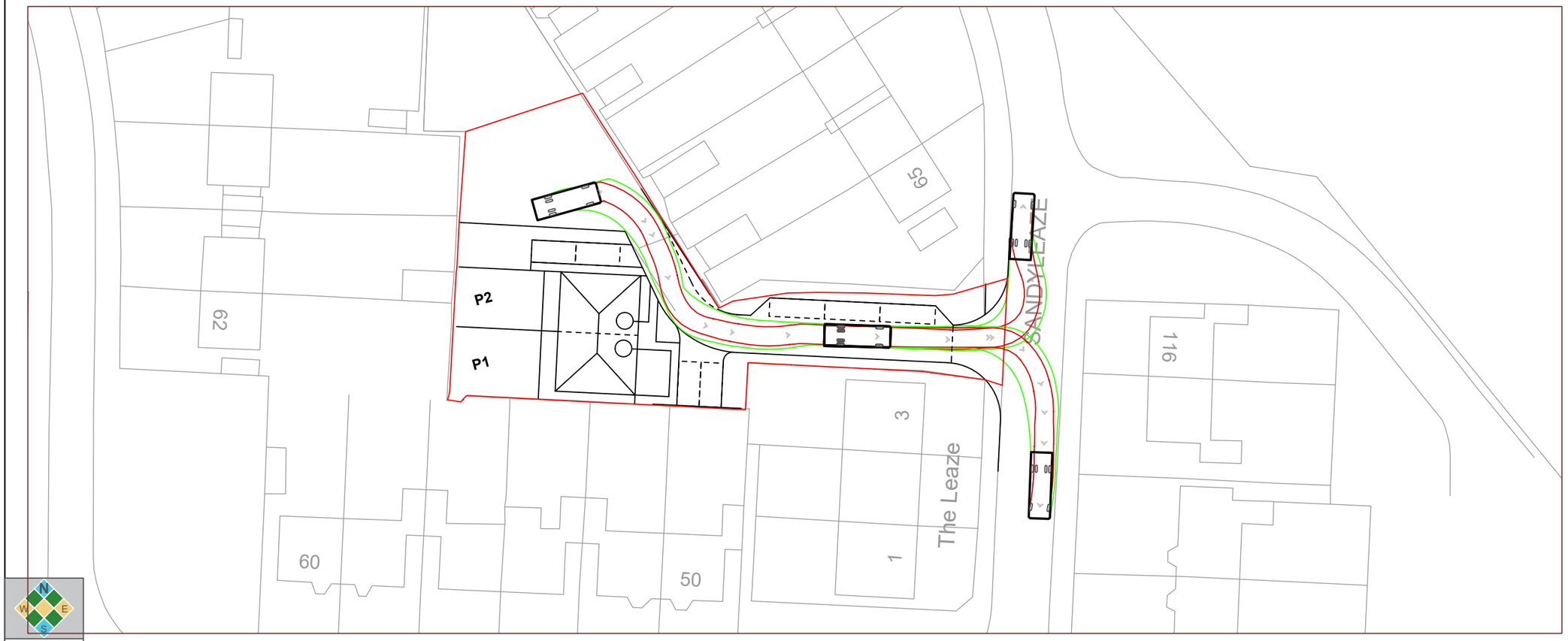
JOB NO:	DRAWING NO:	REVISION:
21-0554	SP01	B

COTSWOLD
TRANSPORT
PLANNING

Appendix I

Swept Path Analysis -
Delivery Vehicle





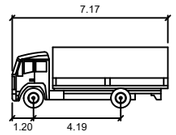
INDICATIVE

RESERVED COPYRIGHT

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. This drawing is based on the Architects layout and OS mapping received from Quattro Design Architects on 01.04.22.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.

Application site boundary provided by Quattro Design Architects.



SRIGID

	meters
Width	: 2.30
Track	: 2.12
Lock to Lock Time	: 6.0
Steering Angle	: 42.7

Rev	Date	Details	Drawn by	Checked by
B	19.04.22	Revised Site Layout	MW	MG
A	04.02.22	Revised Site Layout	MW	MG

COTSWOLD TRANSPORT PLANNING

CLIENT:
Gloucester City Homes

PROJECT:
Sandyleaze, Gloucester

TITLE:
Swept Path Analysis - Delivery Vehicle

STATUS:
INFORMATION

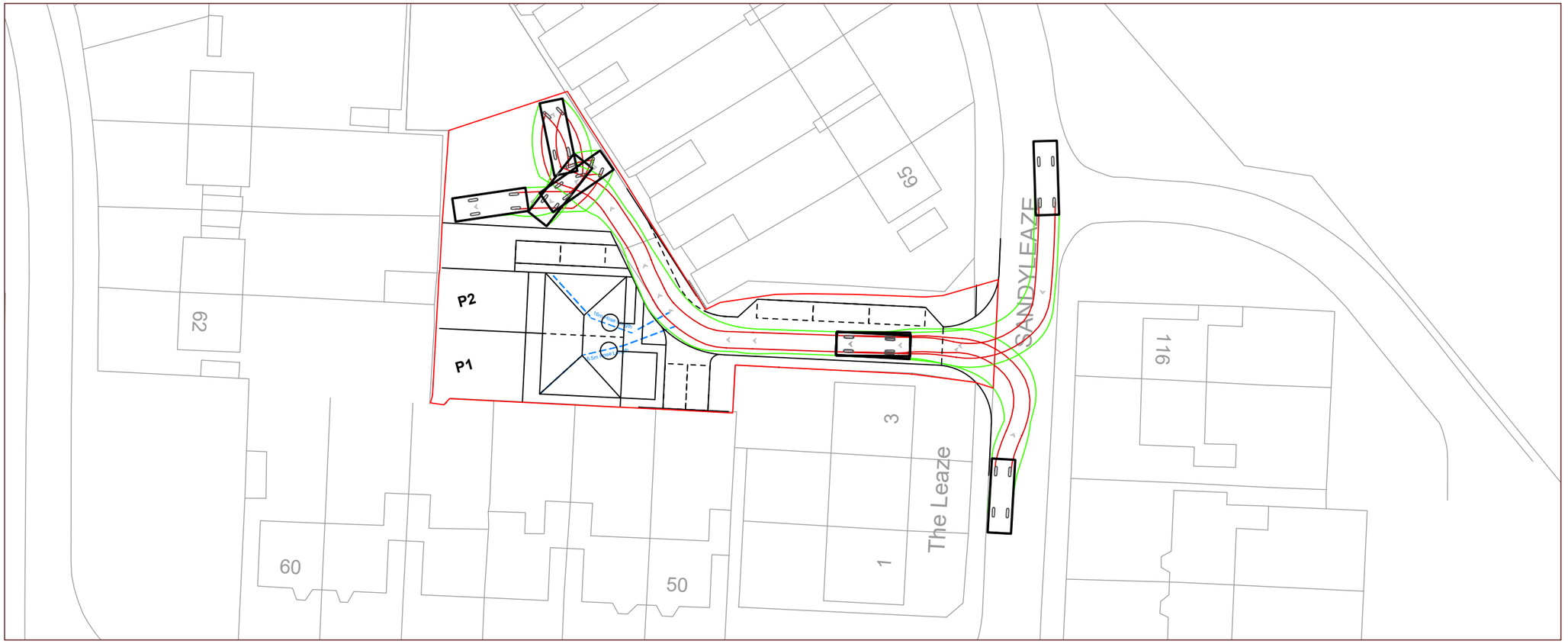
SCALE @ A3:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:500	13.10.21	MW	MG	MG

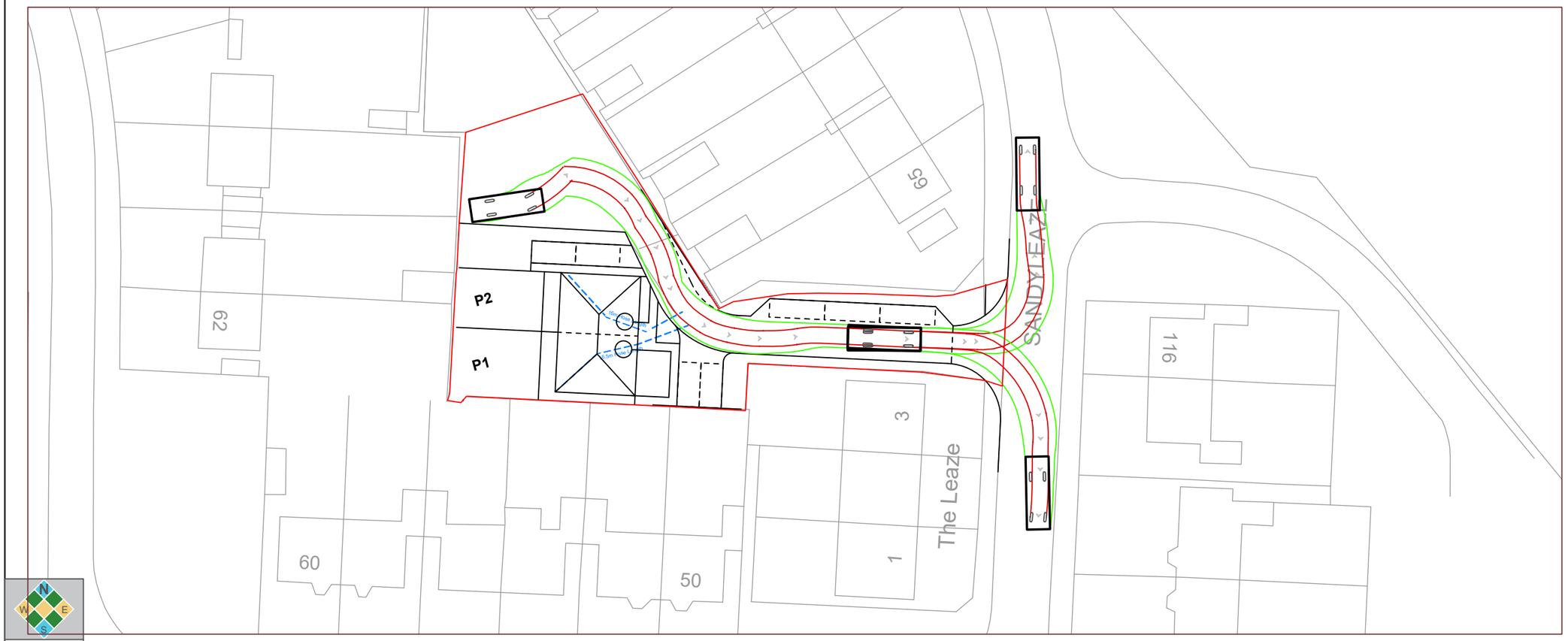
JOB NO:	DRAWING NO:	REVISION:
21-0554	SP02	B

COTSWOLD
TRANSPORT
PLANNING

Appendix J

Swept Path Analysis -
Fire Tender



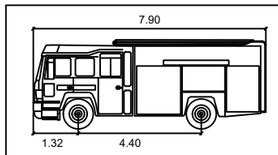


INDICATIVE

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. This drawing is based on the Architects layout and OS mapping received from Quattro Design Architects on 01.04.22.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.

Application site boundary provided by Quattro Design Architects.



Pumping Appliance
meters

Width	: 2.50	Lock to Lock Time	: 6.0
Track	: 1.75	Steering Angle	: 34.3

Rev	Date	Details	Drawn by	Checked by
B	19.04.22	Revised Site Layout	MW	MG
A	04.02.22	Revised Site Layout	MW	MG

COTSWOLD TRANSPORT PLANNING

CLIENT:
Gloucester City Homes

PROJECT:
Sandyleaze, Gloucester

TITLE:
Swept Path Analysis - Fire Tender

STATUS:
INFORMATION

SCALE @ A3:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:500	13.10.21	MW	MG	MG

JOB NO:	DRAWING NO:	REVISION:
21-0554	SP03	B

COTSWOLD TRANSPORT PLANNING

Appendix K

TRICS Data

Calculation Reference: AUDIT-701101-211013-1051

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
	SF	SUFFOLK	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days
10	WALES		
	VG	VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 8 to 18 (units:)
Range Selected by User: 5 to 20 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 08/06/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	4 days
Thursday	2 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	1 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	7

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	10 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	2 days
50,001 to 75,000	2 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	9 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	10 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 HF-03-A-04 TERRACED HOUSES HERTFORDSHIRE
HOLMSIDE RISE
WATFORD
SOUTH OXHEY
Edge of Town
Residential Zone
Total No of Dwellings: 8
Survey date: TUESDAY 08/06/21 Survey Type: MANUAL

2 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
LIVERPOOL
OTTERSPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

3 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

4 NF-03-A-10 MIXED HOUSES & FLATS NORFOLK
HUNSTANTON ROAD
HUNSTANTON

Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: WEDNESDAY 12/09/18 Survey Type: DIRECTIONAL ATC COUNT

5 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY 10/05/17 Survey Type: MANUAL

6 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total No of Dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

7 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total No of Dwellings: 16
Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

8 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	VG-03-A-01 ARTHUR STREET BARRY	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
	Edge of Town Residential Zone Total No of Dwellings:	12	
	Survey date: MONDAY	*08/05/17*	*Survey Type: MANUAL*
10	WK-03-A-02 NARBERTH WAY COVENTRY POTTERS GREEN Edge of Town Residential Zone Total No of Dwellings:	BUNGALOWS 17	WARWICKSHIRE
	Survey date: THURSDAY	*17/10/13*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	14	0.079	10	14	0.237	10	14	0.316
08:00 - 09:00	10	14	0.187	10	14	0.388	10	14	0.575
09:00 - 10:00	10	14	0.086	10	14	0.180	10	14	0.266
10:00 - 11:00	10	14	0.194	10	14	0.137	10	14	0.331
11:00 - 12:00	10	14	0.151	10	14	0.216	10	14	0.367
12:00 - 13:00	10	14	0.245	10	14	0.216	10	14	0.461
13:00 - 14:00	10	14	0.194	10	14	0.173	10	14	0.367
14:00 - 15:00	10	14	0.165	10	14	0.158	10	14	0.323
15:00 - 16:00	10	14	0.266	10	14	0.259	10	14	0.525
16:00 - 17:00	10	14	0.201	10	14	0.144	10	14	0.345
17:00 - 18:00	10	14	0.237	10	14	0.115	10	14	0.352
18:00 - 19:00	10	14	0.259	10	14	0.194	10	14	0.453
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.264			2.417			4.681

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	8 - 18 (units:)
Survey date date range:	01/01/13 - 08/06/21
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

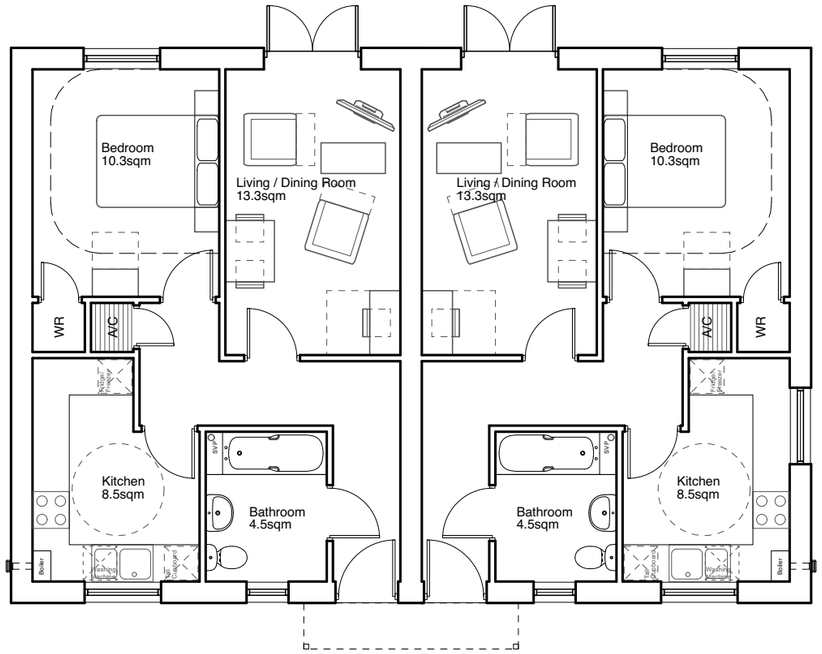
COTSWOLD
TRANSPORT
PLANNING

Cotswold Transport Planning Ltd

Please visit our website at:
www.cotswoldtp.co.uk

Office locations in:
Bedford
Bristol
Cheltenham (HQ)

Registered Office: CTP *H*ouse *K*napp Road, Cheltenham Gloucestershire, GL*50* 3*QQ*
Registered in England and Wales No. 9228763.



Ground Floor
Plot 1
1B2P Bungalow

Ground Floor
Plot 2
1B2P Bungalow

www.quattrodesign.co.uk

NOTES

REVISIONS

REV. DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Proposed Floor Plans

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE 1:100@A3

DATE Mar 2022

DRAWING NO. **REV**

6614-P-200 **-**

Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY [redacted]

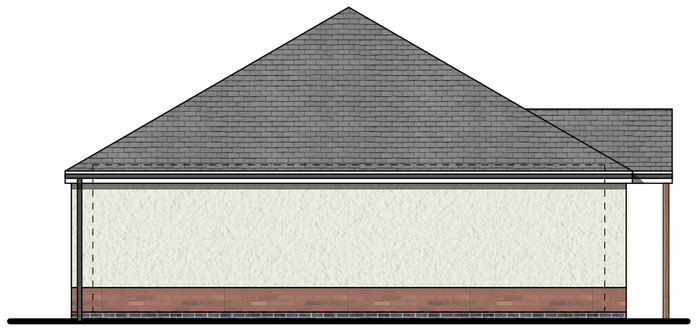
Plot 1
Front Elevation

Plot 2

Plot 2
Side Elevation

Plot 2
Rear Elevation

Plot 1



Plot 1
Front Elevation

www.quattrodesign.co.uk

NOTES

REVISIONS

REV. DATE - DRAWN - CHECKED: NOTES

-: 03.03.22 - JLP - CC:
Drawing created.

DRAWING TITLE

Proposed Elevations

PROJECT

Sandyleaze, Gloucester

CLIENT

Gloucester City Homes (GCH)

SCALE	1:100@A3
DATE	Mar 2022

Quattro designarchitects

DRAWING NO.	**REV**
6614-P-700	**-**

Matthews Warehouse, High Orchard Street
Gloucester Quays, GL2 5QY

KEY

- PRIVATE SURFACE WATER SN6 (100Ø @ MIN 1:100 U.N.O.)
- PRIVATE FOUL WATER SN6 (100Ø @ MIN 1:80 U.N.O.)
- CONCRETE PROTECTION SLAB
- R.E — RODDING EYE
- G — ROAD GULLEY
- EXCEEDANCE ARROW

REV	DESCRIPTION	BY	DATE
		CHKD	DATE

DESIGNERS CDM NOTES

ALL WORKS TO BE CARRIED OUT BY A COMPETENT CONTRACTOR, WORKING TO AN APPROVED SAFE SYSTEM OF WORK, INCLUDING A DETAILED RAMS DOCUMENT

RESIDUAL RISK REGISTER

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING:

DESCRIPTION	IDENTIFIED RISK / HAZARD

davidsonwalsh
37 Prestbury Road | Cheltenham | Gloucestershire | GL52 2PT
[redacted]
www.davidsonwalsh.com

Client: GLOUCESTER CITY HOMES

Project: SANDYLEAZE GLOUCESTER

Drawing: DRAINAGE & EXTERNAL WORKS

Status: PRELIMINARY

Scale	1:100 UNO	Leaf	A1
Drawn	TS	Date	27.04.22
Checked		Date	

Project No. 22032

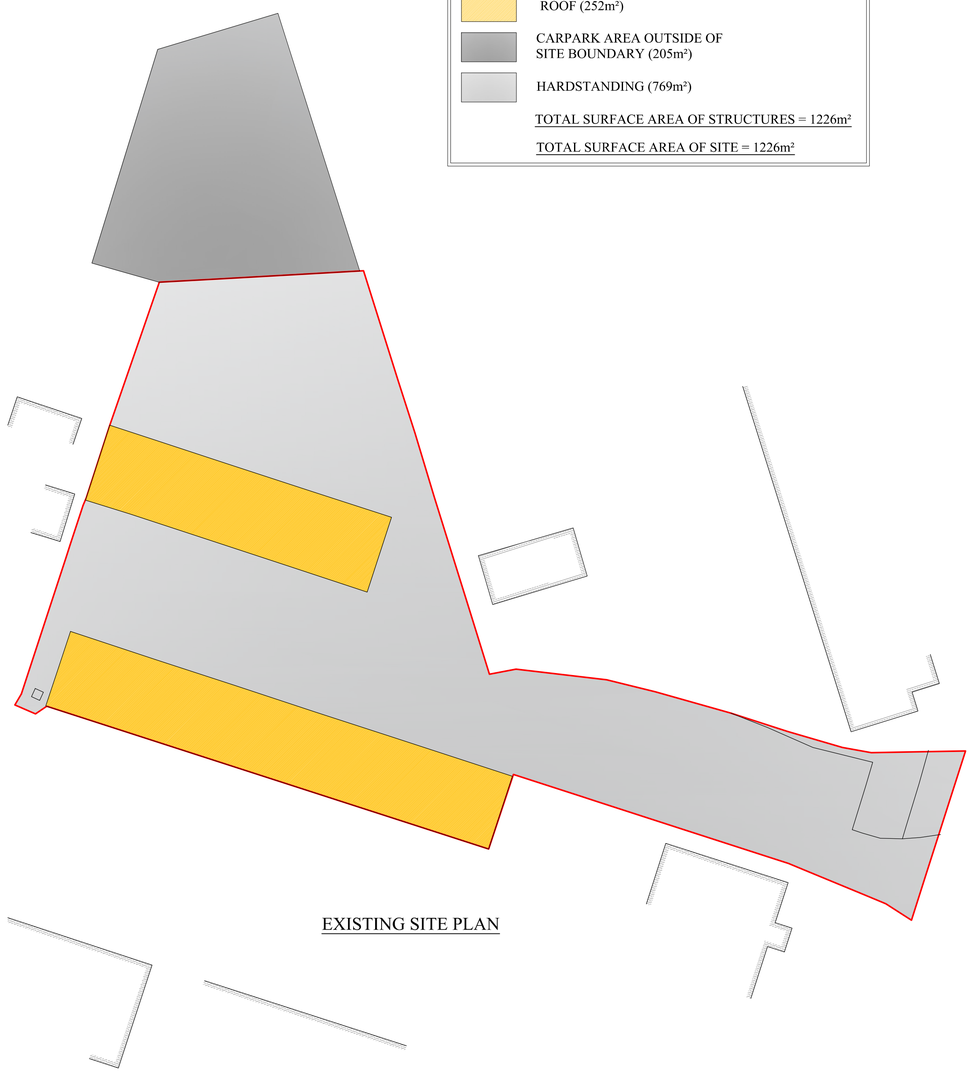
Drawing No. 101 Revision

STRUCTURES AREA KEY:

- ROOF (252m²)
- CARPARK AREA OUTSIDE OF SITE BOUNDARY (205m²)
- HARDSTANDING (769m²)

TOTAL SURFACE AREA OF STRUCTURES = 1226m²

TOTAL SURFACE AREA OF SITE = 1226m²



EXISTING SITE PLAN

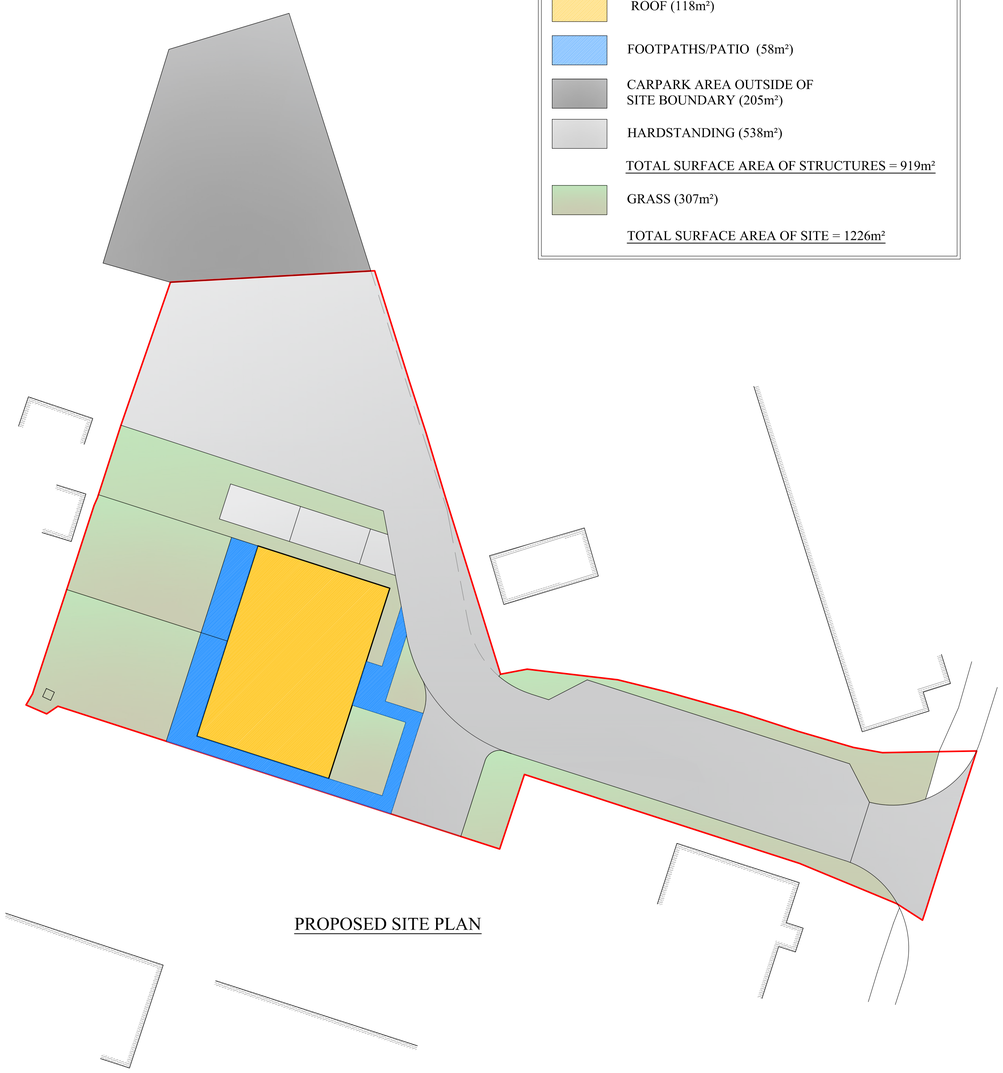
STRUCTURES AREA KEY:

- ROOF (118m²)
- FOOTPATHS/PATIO (58m²)
- CARPARK AREA OUTSIDE OF SITE BOUNDARY (205m²)
- HARDSTANDING (538m²)

TOTAL SURFACE AREA OF STRUCTURES = 919m²

- GRASS (307m²)

TOTAL SURFACE AREA OF SITE = 1226m²



PROPOSED SITE PLAN

REV	DESCRIPTION	BY / CHKD	DATE / DATE

DESIGNERS CDM NOTES

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RESIDUAL RISK REGISTER

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DESCRIPTION	IDENTIFIED RISK / HAZARD

davidsonwalsh

37 Prestbury Road | Cheltenham | Gloucestershire | GL52 2PT

[redacted]

www.davidsonwalsh.com

Client: GLOUCESTER CITY HOMES

Project: SANDYLEAZE GLOUCESTER

Drawing: DRAINAGE AREAS

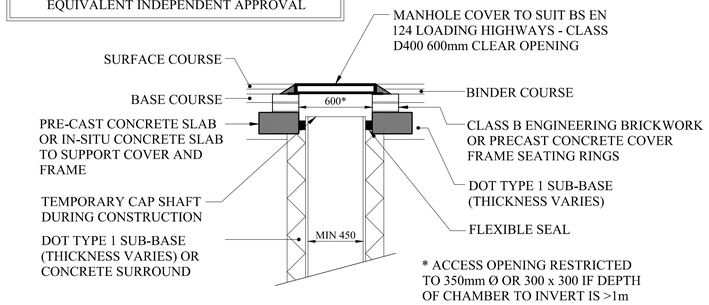
Status: PRELIMINARY

Scale	1:200 UNO	Leaf	A1
Drawn	TS	Date	27.04.22
Checked		Date	

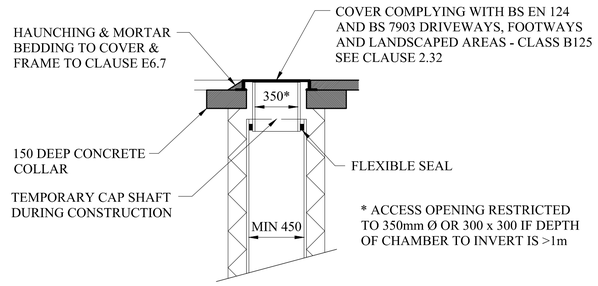
Project No. 22032

Drawing No. 201 Revision

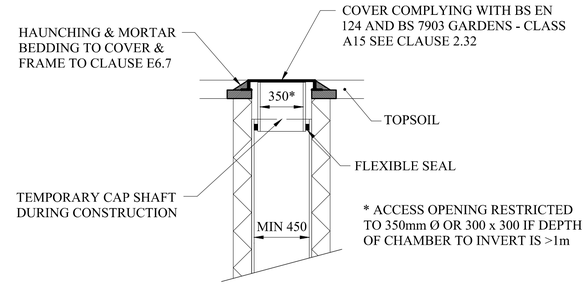
PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL



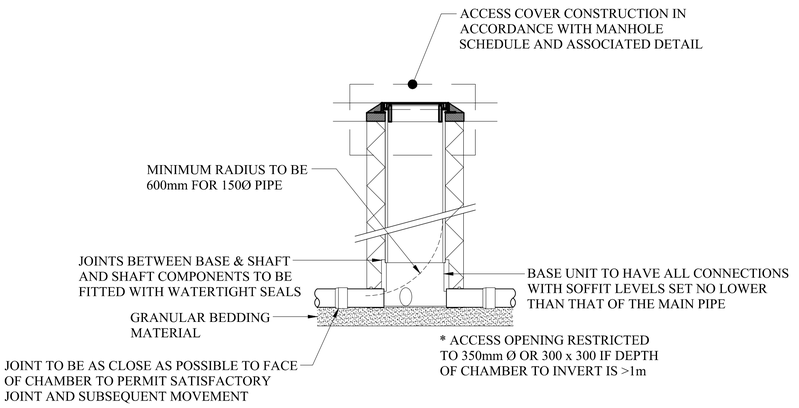
MANHOLE COVER DETAIL
SITED IN ROADS/HIGHWAYS
(CLASS D400)
(1:25)



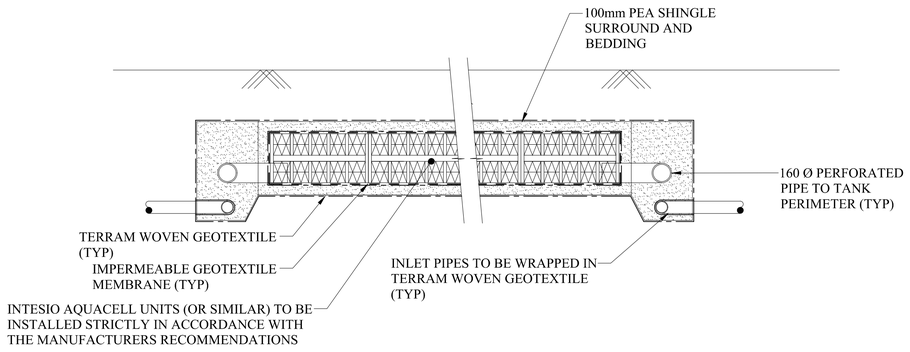
MANHOLE COVER DETAIL
SITED IN DRIVEWAYS/FOOTWAYS
(CLASS B125)
(1:25)



MANHOLE COVER DETAIL
SITED IN DOMESTIC GARDENS
(CLASS A15)
(1:25)



TYPE 4 - TYPICAL POLYPROPYLENE INSPECTION CHAMBER
(IN ACCORDANCE WITH SEWERS FOR ADOPTION 7)
(1:25)

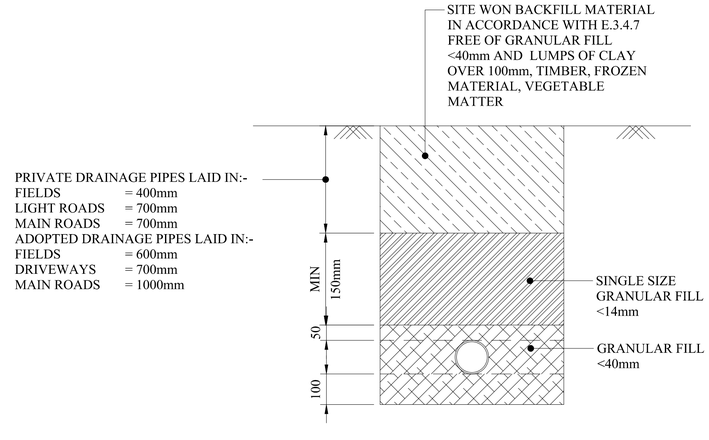


TYPICAL SECTION THROUGH ATTENUATION TANK

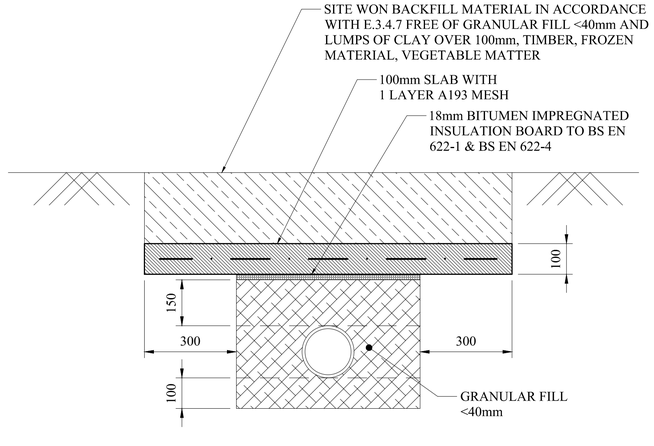
PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 AND BS EN 13598-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL

FORMATION TO ACHIEVE MINIMUM CBR 2%

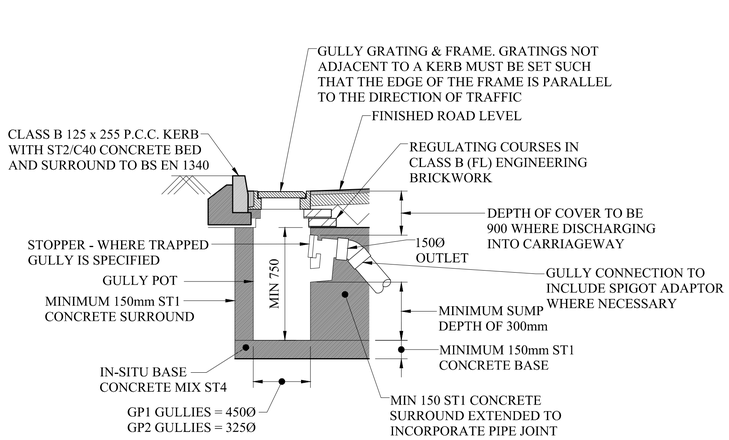
ALL SURFACING MATERIALS ARE TO BE IN ACCORDANCE WITH GLOUCESTERSHIRE TECHNICAL SPECIFICATION FOR NEW STREETS



CLASS 'S' PIPE BEDDING & SURROUND
100Ø PIPE
(1:10)



CONCRETE SLAB PROTECTION DETAIL
150Ø PIPES ≤ 900mm COVER
(1:10)



TYPICAL ROAD GULLY DETAIL
(1:25)

REV	DESCRIPTION	BY	DATE
		CHKD	DATE

DESIGNERS CDM NOTES

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DESCRIPTION	IDENTIFIED RISK / HAZARD

davidsonwalsh
37 Prestbury Road | Cheltenham | Gloucestershire | GL52 2PT
[redacted]
www.davidsonwalsh.com

Client	GLOUCESTER CITY HOMES
Project	SANDYLEAZE GLOUCESTER
Drawing	DRAINAGE DETAILS
Status	PRELIMINARY
Scale	1:25 UNO
Leaf	A1
Drawn	TS
Date	27.04.22
Checked	
Date	
Project No.	22032
Drawing No.	102
Revision	