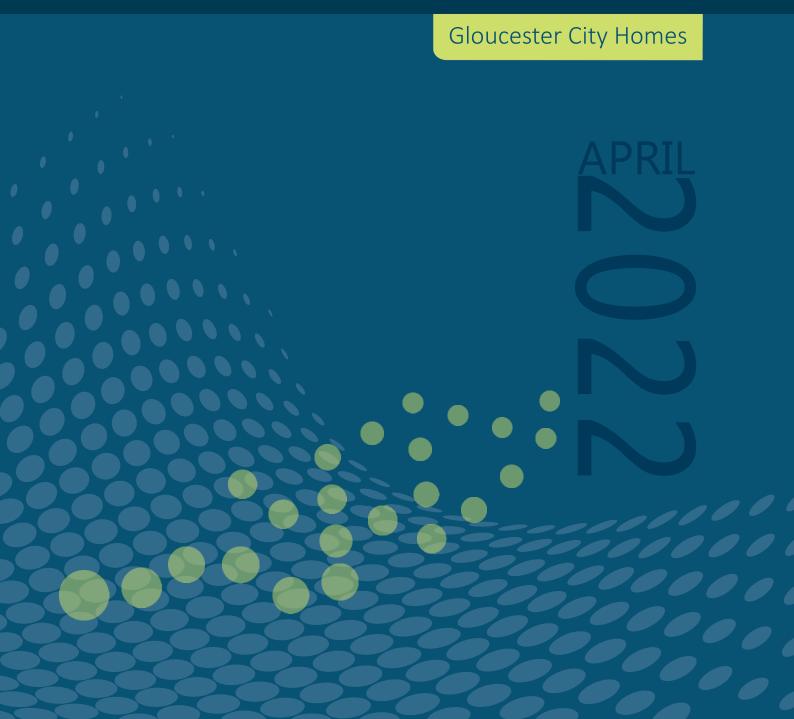
School Lodge, Matson, Gloucester



Transport Statement



Lime Transport Ltd 5A Andrews Buildings Stanwell Rd Penarth, CF64 2AA

www.limetransport.com

Project no.	19156
Document ref.	19156 d2d
Prepared by	HIJ
Checked by	RB
Status	Final
Date	04 April 2022



Table of contents

1	Introduction
1.1	Background3
1.2	Structure of the report
1.3	Planning history4
2	Current situation and accessibility5
2.1	Introduction
2.2	Site location
2.3	Travel characteristics
2.4	Accessibility by walking and cycling6
2.5	Accessibility by public transport
2.6	Local highway network
2.7	Personal injury collision data10
3	Development proposals
3.2	Description of development12
3.3	Pedestrian access
3.4	Vehicle access
3.5	Car parking
3.6	Access by large vehicles
4	Travel characteristics
4.1	Introduction17
4.2	Trip generation17
4.3	Likely impact
5	Summary and conclusions19
5.1	Introduction
5.2	Development proposals
5.3	Trip generation20
5.4	Conclusion



Figures

Figure 1.1 Site location	
Figure 2.1 Local highway network	
Figure 2.2Local amenities within walking distance of the site	
Figure 2.3 Local cycle network	
Figure 2.4 Location of bus stops and bus routes within vicinity of	the site
Figure 2.5Location and severity of personal injury accidents	
Figure 3.1Development layout	

Appendices

Appendix A	Response from LHA
Appendix B	Vehicle swept path analysis: A medium sized vehicle
Appendix C	ATC survey results
Appendix D	Visibility splay at site access: 2.4m x 45m
Appendix E	Vehicle swept path analysis: 10.5m refuse vehicle
Appendix F	Vehicle swept path analysis: 7. 7m fire tender
Appendix G	TRICS 7.6.3: Affordable/local authority flats



1 Introduction

1.1 Background

- 1.1.1 Lime Transport has been commissioned by Gloucester City Homes to produce a Transport Statement in support for a planning application for the proposed re-development of land at School Lodge, Matson, Gloucestershire.
- 1.1.2 As part of the development, it is proposed to refurbish the existing lodge house to provide a community use building. In addition, the proposed development will consist of:
 - Nine one-bed flats;
 - A total of 11 car parking spaces;
 - Cycle parking for up to six cycles; and,
 - A dedicated bin storage
- 1.1.3 The site location is shown in **Figure 1.1** below.



Figure 1.1 Site location

1.2 Structure of the report

- 1.2.1 Following this introductory section, the report is structured as follows:
 - Section 2 describes the sustainability of the area and access to local facilities, including collision data;
 - Section 3 details the development proposals including the on-site layout and access arrangements along Matson Lane, together with the proposed car and cycle parking provision;



- Section 4 presents the travel characteristics of the development; and,
- Section 5 sets out the conclusions of the report

1.3 Planning history

- 1.3.1This report has been produced in response to comments received on Planning Application
19/01110/FUL, from the Local Highway Authority (See Appendix A), including:
 - 'Insufficient information has been submitted to demonstrate that safe and suitable access to the site can be achieved for all users and how users of the site can safety access public transport facilities; and,
 - Insufficient information has been submitted to demonstrate that the proposed layout gives priority to pedestrians, addresses the needs of people with disabilities and reduced mobility and minimised the scope for conflicts between pedestrians, cyclists and vehicles.'



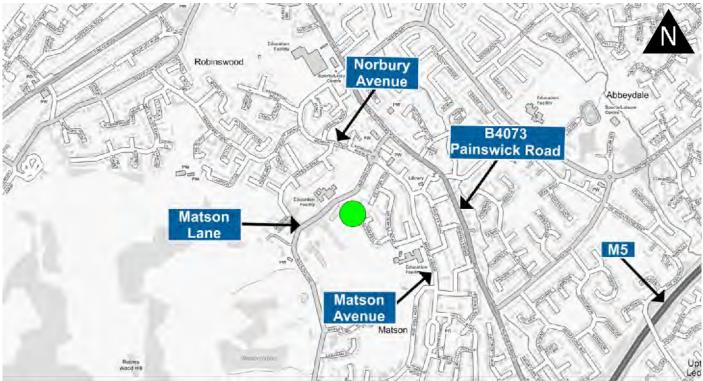
2 Current situation and accessibility

2.1 Introduction

2.1.1 This section of the Transport Statement describes the existing transport network within the vicinity of the site, detailing accessibility by walking, cycling and public transport. This section of the report also sets out the Personal Injury Collision (PIC) data to show the number and severity of accidents that have occurred within close proximity of the proposed development over the most recent 5 year period, and provides a brief description of the local highway network.

2.2 Site location

- 2.2.1 The site is located approximately 3.5km south-east of Gloucester City Centre, and is bounded by:
 - Matson Lane to the north;
 - Residential dwellings to the east and south; and,
 - A fishing lake to the west.
- 2.2.2 The location of the development site, together with the local highway network is shown in **Figure 2.1** below.



Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.1 Local highway network



2.3 Travel characteristics

2.3.1 2011 Census data has been reviewed to establish the travel characteristics of the existing residents within the vicinity of the site, including travel to work and car ownership statistics.

Travel to work

2.3.2 **Table 2.1** below provides a summary of the travel to work mode split for the lower super output area (LSOA 011B) in which the site is located, the middle super output area (MSOA 011), and Gloucestershire County Council (district). The data presented below excludes those that work from home and those not in employment.

	Mode split (%)				
Mode	011B (LSOA)	011 (MSOA)	Gloucestershire County Council (District)		
Car driver	71	66	67		
Car passenger	7	8	6		
Bus	10	11	8		
Train	1	1	1		
Motorcycle	2	2	1		
Cycle	4	5	5		
Walk	5	7	12		
Other	1	1	1		

 Table 2.1
 Travel to work mode split based on 2011 Census data

2.3.3 It can be seen from the table above that 71% of the residents who live within the lower super output area (within which the site is located) use the car (as driver) as the preferred mode of transport to travel to work, with a further 7% travelling as passenger. It can also be seen that 10% of residents travel by bus and 9% either walk or cycle to work.

Car ownership

- 2.3.4 The car or van availability in Gloucestershire County Council as a whole is 1.2 vehicles per household. The car or van availability for family houses is 1.22, and flats/masionettes or apartments 0.59 for.
- 2.3.5 Census data also shows that 82% of the dwellings located in the lower output area are houses, with flats or maisonettes constituting only 18% of all dwellings. Of those living in flats or maisonettes, within the lower area (in which the site is located), 96% have access to one car or fewer, with an average car or van availability of 0.43.

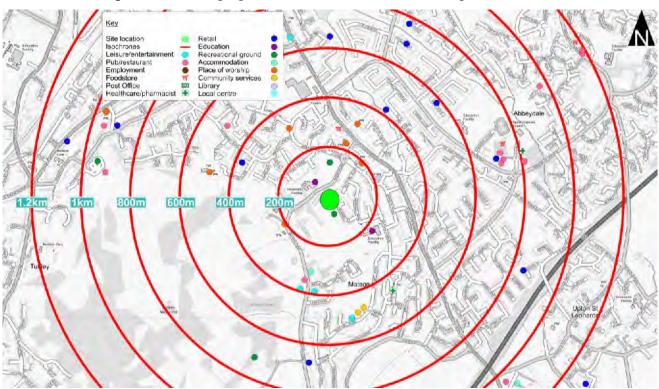
2.4 Accessibility by walking and cycling

2.4.1 Walking can provide health, economic and environmental benefits. It is considered that the site is accessible by walking, cycling and public transport, as described in the following paragraphs.



Walking

2.4.2 The Chartered Institution of Highways and Transportation (CIHT) guidelines 'Providing for Journeys on Foot' indicates that the desirable walking distance for commuting and school journeys is 500m, the acceptable walking distance is 1km, and 2km is the preferred maximum. The CIHT guidelines indicate that the desirable walking distance for 'Elsewhere', including local amenities, is 400m, the acceptable walking distance is 800m and 1.2km is the preferred maximum.



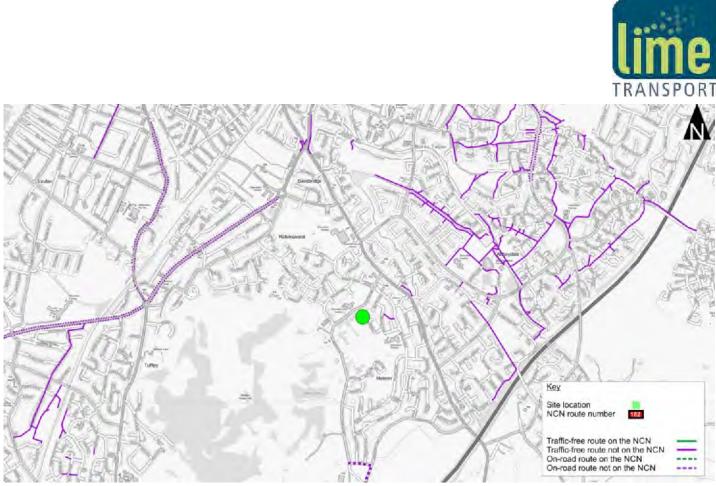
2.4.3 Figure 2.2 below highlights the local amenities within walking distance of the site.

Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.2 Local amenities within walking distance of the site

Cycling

2.4.4 There are a number of local cycle routes within close proximity of the site that provide on-road cycle routes to Gloucester City Centre and the surrounding area. The location of the local on-road and off-road cycle routes within close proximity of the site is shown in Figure 2.3 below.



Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.3 Local cycle network

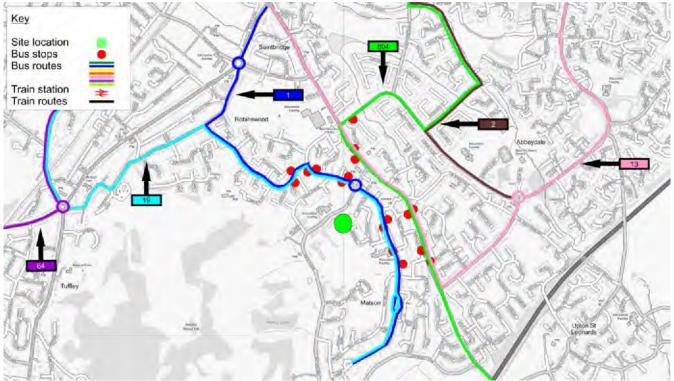
2.5 Accessibility by public transport

Bus services

2.5.1 **Figure 2.4** below highlights the bus routes within the vicinity of the site, and **Table 2.2** provides details of the services that stop at the two closest bus stops. The closest bus stop is located along Norbury Avenue, which provides connections to Gloucester City Centre every 10 minutes.







Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.4 Location of bus stop and bus routes within vicinity of the site

Route No.	Distance (m)	Route	Frequency per hour (Monday - Friday)
Norbury	y Avenue		
1	300	Gloucester – Robinswood – Matson – Robinswood – Gloucester	Every 12 minutes
Painswi	ck Road		
13	440	Gloucester – Wheatway	One an hour 9am-2pm

Table 2.2 Summary of the main bus routes serving the bus stations

2.5.2 It can be seen from the information presented above that there is a number of bus services within easy walking distance of the site, which provides convenient access to Gloucester City Centre.

Rail services

2.5.3 Gloucester Train Station is the closest train station, located approximately 3.5km northwest of the site. Gloucester Train Station is managed by Great Western Railways and provides regular connections to Cheltenham and Nottingham to the north, Cardiff Central, Maesteg, Fishguard Harbour to the south, and London Paddington to the east.



- 2.5.4 There are approximately six trains an hour depart from Gloucester Railway Station throughout the day (7am-7pm), with a journey time of approximately 1 hour to Cardiff Central, approximately 2 hours to London Paddington, and approximately two and a half hours to Nottingham. Gloucester train station is accessible by bus with a journey time of approximately 22 minutes.
- 2.5.5 Gloucester Train Station has car parking for up to 244 vehicles, which is located to the east of the station and is accessible via the A430, Station Approach. The car park is managed by APCOA Parking which operates a Pay and Display system all day Monday Sunday, with a parking tariff of £5.80 per day.
- 2.5.6 Sheltered cycle storage is available at Gloucester Train Station, which is located on Platform 2.

2.6 Local highway network

2.6.1 The local highway network in the vicinity of the site is shown in Figure 2.1 above and is described in **Table 2.3** below.

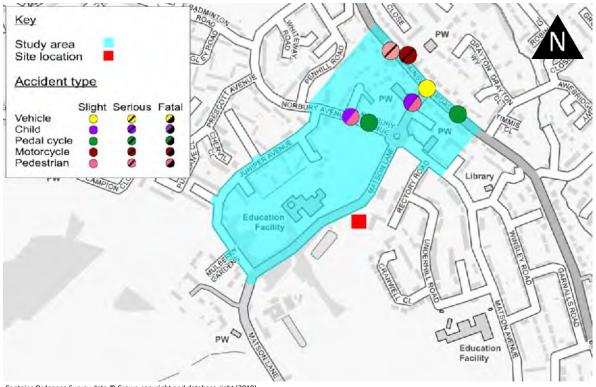
Description			
Matson Lane			
	Single carriageway rural road providing connections to		
Description	Winnycroft Lane to the south and Norbury Avenue/ Matson		
	Avenue to the west.		
Width	6m		
Speed limit	20mph adjacent to site access		
Street lighting	Yes		
Pedestrian facilities	Pedestrain footways located on both sides of the carriageway		
Peuestian lacinties	from Norbury Avenue/ Matson Avenue past the site access		
Bus route	No		
	Generally semi-rural in appearance with the presence of some		
Character	residential dwellings and Moat Primary School fronting the		
	road		
On street parking	Double yellow lines are located along the east side of the		
On-street parking	carriageway		

Table 2.3 Description of local highway network

2.7 Personal injury collision data

2.7.1 Personal injury collision data has been obtained for the most recent 5-year period (2016 to 2020 inclusive). **Figure 2.5** below shows the number of collisions within the study area surrounding the site and the severity of the collisions presented in **Table 2.4**.





Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.5 Location and severity of personal injury collisions

Personal injury			ury	No. of	Colli	ing vulnerab	vulnerable users	
Year	Fatal	Serious	Slight	casualties	Cyclist	Child	m/cyclist	Pedestrian
2016	0	0	3	4	2	1	0	0
2017	0	1	1	2	0	0	1	1
2018	0	0	0	0	0	0	0	0
2019	0	0	1	1	0	1	0	1
2020	0	1	0	1	0	0	0	1
Total	0	2	5	8	2	2	1	3

Table 2 A	Summary of	norsonal	iniur	, collision	data
1 UDIE 2.4	Summury Oj	personui	mjury	COMSION	uutu

2.7.2 It can be seen from the table above that a total of seven collisions have occurred within close proximity of the site over the past five years. Of these collisions:

- five resulted in slight injuries being sustained; and,
- two resulted in serious injuries being sustained by vulnerable users, with:
 - one involving a motorcyclist
 - one involving a pedestrian
- 2.7.3 Due to the size of the development and the low level of vehicle trips likely to be generated, it is considered that the development will have a minimal impact on the highway network and, therefore, is unlikely to have an adverse impact on road safety.



3 Development proposals

3.1.1 This section of the Transport Statement describes the development proposals with regard to the access arrangements for cars, refuse, emergency vehicles, delivery and servicing vehicles, together with the car and cycle parking provision.

3.2 Description of development

- 3.2.1 As part of the planning application, it is proposed to refurbish the existing lodge to provide a community use building, which will be available for use/hire by residents of the proposed development, as well as the wider community. In addition, it is proposed to provide:
 - Nine no. 1-bed flats in a purpose-built building at the rear of the site;
 - A total of 11 car parking spaces (of which two will be accessible parking spaces);
 - On-site bin storage; and,
 - Three Sheffield stands/six cycle spaces.



3.2.2 The site layout is show in **Figure 3.1** below.

Figure 3. 1 Development layout



3.3 Pedestrian access

- 3.3.1 Pedestrian access to the proposed development will be gained via the existing footway along the southern edge of Matson Lane (to the north), which leads to a shared surface style street design.
- 3.3.2 There is also an existing pedestrian link to Painswick Park, which is located immediately north of the retained lodge building, as well as footpaths leading to the park to the south-east of the proposed residential building.

3.4 Vehicle access

- 3.4.1 Vehicles will gain access to the parking court via the existing access from Matson Lane to the north. Parking for the proposed development will be provided in the parking court, which will be located in the centre of the site (between the retained building and the proposed residential building).
- 3.4.2 A vehicle swept path analysis has been carried out which shows that a medium sized vehicle can access the site and manoeuvre throughout the parking court, exiting in a forward gear (**Appendix B**).

Visibility splay

3.4.3 In order to determine the required visibility splays at the site access, an Automatic Traffic Count (ATC) survey was undertaken along Matson Lane, in the vicinity of the site access, between 3rd to the 9th December 2020. The results of the surveys are presented in full in **Appendix C**, and the 85th percentile speeds recorded during the survey are summarised in **Table 3.1** below.

Date	Day of the week	eastbound	westbound
3 rd December	Thursday	30.9	31.4
4 th December	Friday	31	31.1
5 th December	Saturday	30.5	31.5
6 th December	Sunday	30.8	31.8
7 th December	Monday	31.2	30.9
8 th December	Tuesday	31.2	31.2
9 th December	Wednesday	30.8	31.4
5-day (weekday)		31.0	31.2
7-day (week)		30.9	31.3

Table 3.1 ATC survey results

- 3.4.4 Based on the above, the required Stopping Sight Distance (SSD) in both directions is as follows:
 - 45m SSD to the west of the site access; and,
 - 45m SSD to the east of the site access.



3.4.5 The required visibility splays at the proposed site access, are presented in **Appendix D.** It can be seen that the required visibility splays can be achieved to the east and west of the access, within land owned by the applicant or within public highway.

3.5 Car parking

3.5.1 **Table 3.1** below sets out the required parking standards for the proposed development of nine one dwellings as set out in Gloucester Local Transport Plan 2011-2026 (2010).

 Table 3.1 Car parking standards: Gloucester Local Transport Plan 2011-2026 (2010)

Type of development	Residential	Visitors	Car parking requirement	
C3 Dwelling	1.5 space per	0.2 spaces per	15	
house/ flats	dwellings (average)	dwelling		

- 3.5.2 As outlined above, it is proposed to provide nine residential parking spaces, and a further two spaces for visitors to either the residential dwellings or the community use facility, which is below the maximum standards outlined in Table 3.1 above.
- 3.5.3 However, it is recognised that parking standards are guidelines that form a consistent basis for discussion between developers applying for permission and the Local Planning Authority. It is recognised that situations arise where local circumstances justify a variation from the standards. It is important to consider local car ownership data, access to local facilities and the availability of alternative means of travel when determining the appropriate level of parking.
- 3.5.4 Gloucester Local Transport Plan (2010) states that 'the proposed standards are maxima, the great majority of new developments will provide less than the maximum permitted level of car parking, and in many cases much less'.
- 3.5.5 The Gloucester Local Transport Plan (2010) recognises that the parking requirement can vary depending on the size and tenure of a development. As presented in the Gloucester Local Transport Plan (2010) '*Residential Car Parking Research (DCLG, May, 2007), has identified that the following factors has a significant influence on car ownership and car parking demand:*
 - Dwelling size, type and tenure;
 - Dwelling location; and,
 - Availability of allocated and unallocated parking standards'
- 3.5.6 The following paragraphs set out policy, car ownership statistics based on housing type and tenure, as well as a description of the site's sustainability.



National policy

- 3.5.7 Parking standards should take account of local factors and sustainability issues and aim to achieve a common approach to parking provision. The rationale is to achieve sufficient parking to avoid the need for vehicles to park on-street, and potentially cause obstruction, congestion, danger and visual intrusion.
- 3.5.8 The National Planning Policy Framework (2021) states that local parking standards for residential development should take into account:
 - The accessibility of the development;
 - The type, mix and use of development;
 - The availability of and opportunity for public transport; and,
 - Local car ownership levels.

Site's sustainable location

3.5.9 The site is located within Gloucester City Council, with close proximity to a range of local services and public transport facilities.

Housing type and tenure

- 3.5.10 The proposed development will consist of one-bed flats, all of which will be affordable, and it is considered that current parking standards do not reflect the type, tenure or size of a development. There is significant evidence to show that, typically, affordable housing has a lower car ownership than private housing. Furthermore, one-bed flats have a lower car ownership than family houses.
- 3.5.11 The car ownership data for affordable housing in the area is considerably lower than all housing at only 0.43 cars per dwelling. This ownership level would generate a demand for four car parking spaces.

Availability of unallocated parking spaces

3.5.12 It should be noted that none of the 11 spaces on site will be allocated, which is more flexible and efficient in terms of the land use. Unallocated parking accommodates different levels of car ownership across households and usage patterns across the day for different uses. It is anticipated that the provision of 11 car parking spaces will accommodate the potential demand for parking.

Summary

3.5.13 It is, therefore, considered that the provision of nine car parking spaces and a further two visitor spaces (for visitors to either the residential dwellings or community use building) is appropriate, whilst using land efficiently.



3.6 Access by large vehicles

Refuse

- 3.6.1 As part of the development, it is prosed to provide a dedicated refuse bin storage on site. Refuse will be collected on site, with refuse vehicles accessing the development via Matson Lane. A swept path analysis has been carried out to show a 10.5m refuse vehicle can safely access the development, manœuvre within the turning head, and exit in a forward gear. This is shown in **Appendix E**.
- 3.6.2 The bin store will be located within the recommended walk distance for both residents and refuse operatives.

Emergency vehicles

3.6.3 As part of the development, all flats will be fitted with a sprinkler system. A swept path analysis has been carried out which shows that a 7.7m fire tender can successfully access and manoeuvre throughout the site (as shown in **Appendix F**).

Delivery and servicing

3.6.4 It is anticipated that delivery and servicing vehicles can access the site via Matson Lane (to the north) and park on-site. Due to the size of the development, it is likely that the number of deliveries will be low. Furthermore, there is sufficient parking onsite to accommodate any occasional deliveries to either the residential or the community uses.



4 Travel characteristics

4.1 Introduction

- 4.1.1 In order to assess the impact of the proposed development on the existing highway network, it is necessary to estimate the number of person trips generated by the proposed use. This section outlines the methodology used to predict the person trip generation (by mode), based on a review of the TRICS 7.6.3 trip generation database.
- 4.1.2 It should be noted that the community use building is considered ancillary to the residential dwellings, and as such it is unlikely to be a primary trip attractor. Therefore, for the purposes of this assessment, any person trips generated by the community use building have been ignored.

4.2 Trip generation

- 4.2.1 In order to predict the number of trips generated by the proposed development of nine affordable (one-bed) flats, sites have been selected on the basis of the following criteria:
 - Land use: Residential; Affordable/local authority flats;
 - Survey type: Multi-modal;
 - Survey days: Tuesday Friday;
 - Number of dwellings (range selected by user): 6 to 191;
 - Number of dwellings (actual range): 15 to 62;
 - Location of selected sites: Town Centre, suburban area, neighbourhood centre; and,
 - Geographical areas: UK (excluding London, Northern Ireland and Republic of Ireland).
- 4.2.2 Due to the nature of the development and the location of the site, a limited number of suitable sites were available. A total of seven sites were selected, with the data summarised in **Table 4.1** below and presented in full in **Appendix G**.



Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total no. of trips	
Total persons							
8am-9am	0.161	1	0.377	3	0.538	5	
5pm-6pm	0.362	3	0.256	2	0.618	6	
7am-7pm	2.974	27	3.048	27	6.022	54	
Pedestrians							
8am-9am	0.065	1	0.161	1	0.226	2	
5pm-6pm	0.146	1	0.106	1	0.252	2	
7am-7pm	1.334	12	1.343	12	2.677	24	
Cyclists							
8am-9am	0.015	0	0.015	0	0.03	0	
5pm-6pm	0.02	0	0	0	0.02	0	
7am-7pm	0.09	1	0.08	1	0.17	2	
Public trans	port users						
8am-9am	0.005	0	0.015	0	0.02	0	
5pm-6pm	0.055	1	0.005	0	0.06	1	
7am-7pm	0.295	3	0.345	3	0.64	6	
Vehicles							
8am-9am	0.065	1	0.111	1	0.176	2	
5pm-6pm	0.163	1	0.095	1	0.231	2	
7am-7pm	1.007	10	0.972	9	1.979	18	

Table 4.1 Total trip generation - nine affordable flats

- 4.2.3 It can be seen from the table above that the proposed development is likely to generate up to two vehicle movements (two-way) in both the morning and evening peak periods, with a total of 18 vehicle movements (two-way) throughout the day.
- 4.2.4 It can also be seen from the table above that:
 - Walking is likely to be the preferred mode of transport, representing approximately 44% of total daily trips (as the primary mode) and a further 11% as part of a public transport trip; and,
 - Vehicles are the second most popular mode of transport, representing 33% of total daily trips.

4.3 Likely impact

4.3.1 Based on the likely volume of vehicle trips, outlined in Table 4.1 above, it is considered that the proposed development of nine affordable dwellings (and community use building) can be accommodated on the surrounding highway network.



5 Summary and conclusions

5.1 Introduction

5.1.1 Lime Transport has been commissioned by Gloucester City Homes to produce a Transport Statement in support of a planning application for the re-development of School Lodge, Matson, Gloucestershire.

5.2 Development proposals

- 5.2.1 As part of the planning application, it is proposed to refurbish the existing lodge to provide a community use building, which will be available for use/hire by residents of the proposed development as well as the wider community, and to provide:
 - Nine no. 1-bed flats in a purpose-built building at the rear of the site;
 - A total of 11 car parking spaces (of which two will be accessible parking spaces);
 - On-site bin storage; and,
 - Three Sheffield stands/six cycle spaces.
- 5.2.2 The site is located within Gloucester City Council, and is in close proximity of a range of local services and public transport facilities. The development will consist of 100% affordable units, therefore, based on the tenure and location of the site it is likely that the car ownership associated with the development will be relatively low.

Vehicle parking

- 5.2.3 As part of the development, it is proposed to provide a total of 11 car parking spaces, which is considered sufficient based on the type, size, tenure and location of the development. The site is well-connected, with access to a range of local amenities and public transport facilities. A swept path analysis has been carried out which shows that a medium sized car can access the parking spaces, manoeuvre within the parking court and exit in a forward gear.
- 5.2.4 Vehicles will access the site via the existing site access from Matson Lane to the north. The required visibility splays at the access (based on the results of the ATC survey) can be achieved in both directions.

Refuse

5.2.5 Refuse storage bins will be provided on site for residents to dispose of their waste and will be collected by the Local Authority as part of an existing collection. A refuse vehicle swept path analysis has been carried out, which shows that a 10.5m refuse vehicle can safely access the development, manoeuvre within the turning head provided, and exit in a forward gear.



Emergency services

5.2.6 As part of the development, all flats will be fitted with a sprinkler system. A swept path analysis shows that a 7.7m fire tender can successfully access and manoeuvre throughout the site.

Delivery and servicing

5.2.7 It is anticipated that deliveries and servicing vehicles can gain access to the development and park onsite. Due to the size of the development, it is likely that the number of deliveries will be low. Furthermore, there is sufficient parking onsite to accommodate any occasional delivery vehicles.

5.3 Trip generation

- 5.3.1 It is predicted that the proposed development will generate a total of two vehicle movements (two-way) in the morning peak and evening peak periods. Walking is likely to be there preferred mode of transport.
- 5.3.2 Based on the likely volume of vehicle trips, outlined above, it is considered that the proposed development of nine affordable dwellings (and community use building) can be accommodated on the surrounding highway network.

5.4 Conclusion

5.4.1 It is considered that the proposed development of nine affordable units, and community use building, will have a minimal impact on the surrounding transport network in terms of capacity and safety and can be accommodated easily within the existing highway network.



Appendices



Appendix A

		Hi	ighwa	iys	Devel	opn	nent	Glo	ement ire Hall ucester L1 2TH
Gloucester City Planning Shire Hall Westgate Street Gloucester GL1 5TG	Council								
Our Ref: G/2019/04	43899	Your Ref: 19/0	1110/Fl	JL			Date 2019	: 25 Novem	ber
Proposal:	units (including comprising 9nd conversion of t lodge (curtilage building) to 1nd space, landsca	alopment of 10 res 3 storey building 5. 1 bedroom flats he existing curtila to Grade 2 listed 5. 2 bedroom hou aping, sustainable rking and associa	i s, and age liste d se), ope e draina	ed en	Receiv			4 Novemb	er 2019
Recommendatio	No ob	ojection			No obje		tions)	ject to	
n:	Refusal X		X		Furth	In Information X		X	
Document(s), drawing(s) and reference(s):	 Plannin Design Road \$ 5591-F 5591-F 			h	anning istory ef(s):		_		

	The Highway Authority recon following reasons:-	nmends that this application be refused	d for the			
Details of	suitable access to the	rmation has been submitted to demonstrate that safe and to the site can be achieved for all users and how users of ely access public transport facilities.				
recommendation :	 Insufficient information has been submitted to demonstrate that the proposed layout gives priority to pedestrians, addresses the needs of people with disabilities and reduced mobility and minimises the scope for conflicts between pedestrians, cyclists and vehicles. 					
	More favourable consideration may be given if the above issues raised can be addressed and accord with section 9 of the NPPF. The above points have been					
	expanded on within the email s	ent directly to the LPA on the 13 th Novem	ber 2019.			
	ITU	Highways Records				
Required	Rd Safety	Fire Service				
consultation:	PROW	Structures				
	LHM	Police				

Sent: 13 November 2019 20:32

Subject: Application Number 19/01110/FUL at The School Lodge 1 Matson Lane Gloucester GL4 6DX

Hi

Ref the above application, please find my initial comments below:

Road Safety Audit

Designers response and exception report (if applicable) required.

Below are comments on each point raised by the auditor that require addressing, most of which were initially raised through all previous pre-application correspondence.

- 2.1.1 Continuation of vehicular cross over is required to ensure pedestrian priority is maintained.
- 2.2.1 SPA required.
- 2.2.2 Relocate residential dwelling (School Lodge) parking away from site access.
- 2.2.3 Surface water drainage plan required.
- 2.2.4 Public utilities / services apparatus plan required.
- 2.2.5 Tracking should be provided demonstrating a refuse vehicle passing a private estate throughout the layout including within turning heads with 500mm clearance to boundaries (vertical kerb-line structure, tree, formal parking space etc.) and between vehicles. To avoid large bend radii's it is acceptable that a car and a refuse do not have to pass each other on a junction, providing that adequate forward visibility is provided (demonstrated) to allow drivers to be able see another vehicle prior to committing to the manoeuvre. However, a supermarket delivery box van should be able to pass an estate car on carriageways including bends and junctions. Waste vehicles should be able to stop as close as possible to dwelling storage or collection points, and good practice is that residents should not be required to carry waste more than 30m (excluding any vertical distance) to the storage point, waste collection vehicles should be able to get within 25m of the storage point and collectors should not have to move standard two wheel bins over 15m or four wheeled bins over 10m (distances to be demonstrated). If these distances cannot be achieved consideration should be given to providing bin stores that coincide with these distances.
- 2.3.1 As per 2.1.1 demonstrate vehicular cross over, extending footways on both side to tie in within the existing footways wither side.
- 2.3.2 It should be noted that GCC currently has no technical specification for shared space. This is an adoption matter to which GCC are not obliged to adopt any highway. GCC will only adopt roads that meet our published technical specification. The supporting documentation states that GCH wants the internal highway to be adopted and therefore the layout may need to be amended in light of this. If shared surface is still proposed widths including any changes will need to be annotated along with an unobstructed delineated pedestrian corridor. Any footway leading into the site will also need to be tapered into the shared surface with a transitional feature.
- 2.3.3 As per 2.1.1, 2.3.1 and 2.3.2.

- 2.3.4 the Highway Authority will be recommending conditions to secure the pedestrian improvements between the site and the local facilities.

Transport Statement

The application appears to lack highway details such as:

- Projected trips (based on a surveyed donor site or TRICS analysis)
- Personal Injury Collisions recorded
- Visibility splays for site access
- Visibility splays to ensure no obstructions from parking bays are present.
- Justification for the proposed parking schedule in the absence of the assessment of the DCLG's Residential Car Parking Research Document (RCPR) the Highway Authority has reviewed the 2011Cencus data (QS416EW))which has demonstrated a need for 1.59 spaces per dwelling (totalling 16). Visitor spaces at a ratio of 0.2 dwelling would bring the total to 18
- Proposed PRoW SM39 diversion

<u>Other</u>

How will parking be controlled? As no parking has been provided for the school (pick-up/drop-off) or 'Manglers' (Matson Anglers) whom of both use the area to park historically what measures are proposed to ensure these spaces and internal turning head are only used by residents and associated visitors to site?

In summary if all of the points within the RSA are agreed to and adequately addressed reflected within revised plans and short TS covering highway related matters provided, subject to everything being acceptable the Highway Authority would be in a position to provide more positive comments.

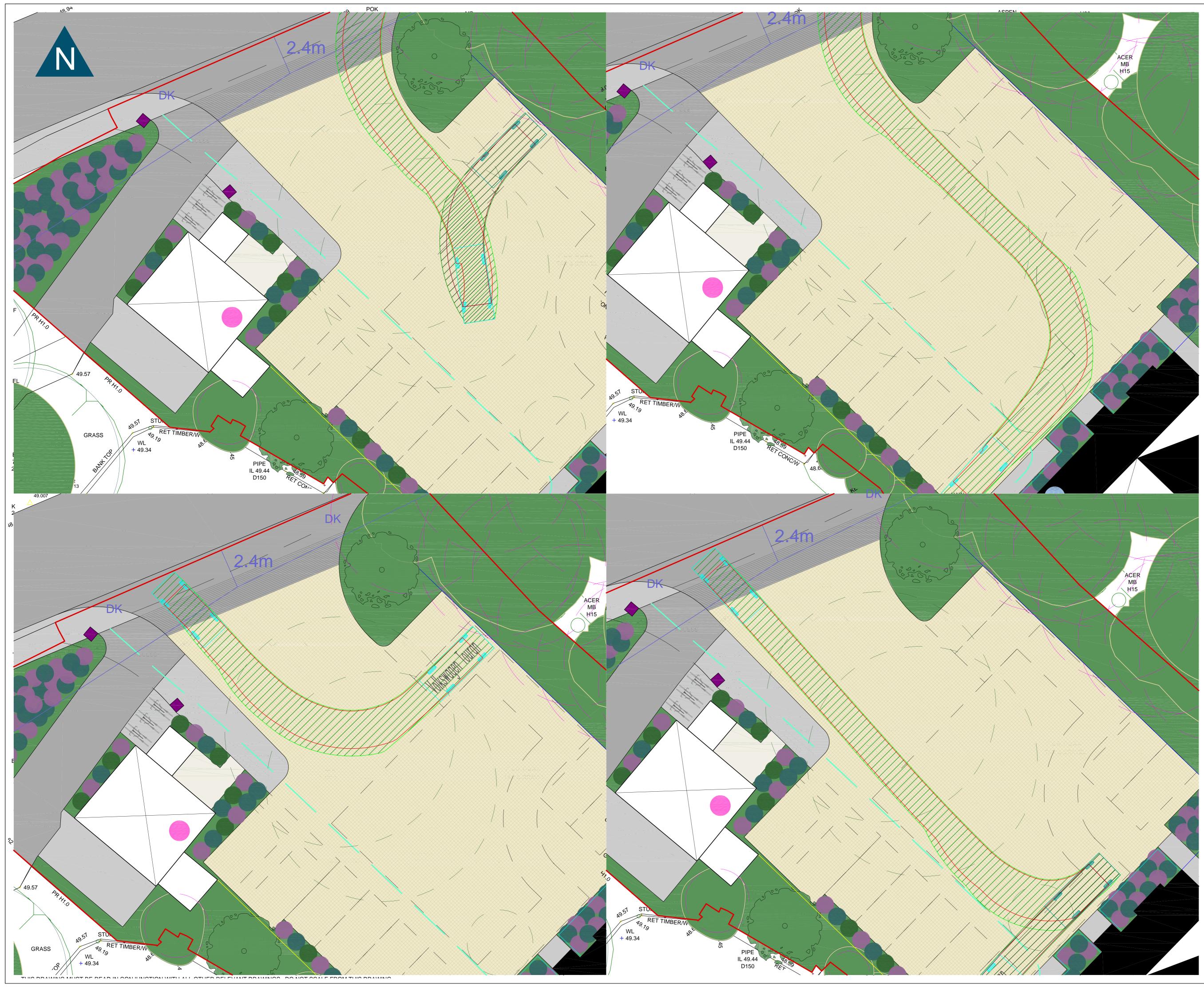
Thanks

Regards

Development Coordinator Highways Development Management Gloucestershire County Council, Shire Hall, Gloucester GL1 2TH

Appendix B





1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

4.527 0.007 ľol 0.978 + 2.646

Volkswagen Touran Overall Length Overall Width Overall Body Height Min Body Ground Clearance Max Track Width Lock to Lock Time Kerb to Kerb Turning Radius

4.534m 1.829m 1.491m 0.253m 1.734m	
1.734m 4.00s 5.042m	

NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check

••••
lime
TRANSPORT

Drawing Status PRELIMINARY

Project

School Lodge, Matson

Title

Swept path analysis Volkswagen Touran Date 04/04/2022

Scale 1:100@A1 Drawn JP

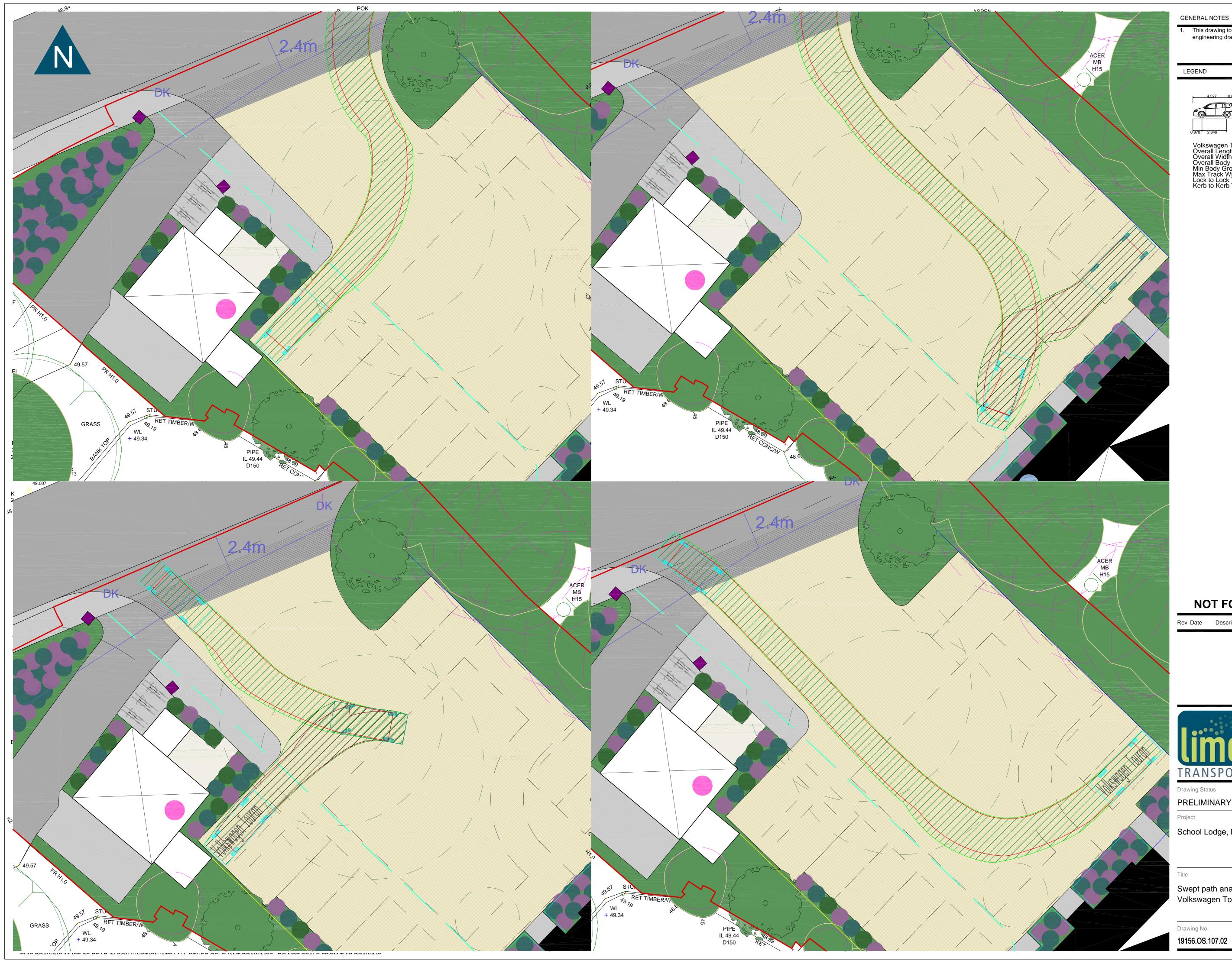
Checked HLJ Project No

19156

Client Project No

Revision

Drawing No 19156.OS.107.01



1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

Volkswagen Touran Overall Length
Overall Length
Overall Width
Overall Body Height
Overall Body Height Min Body Ground Clearance
Max Track Width
Lock to Lock Time
Kerb to Kerb Turning Radius
0

4.534m	
1.829m 1.491m	
0.253m	
1.734m	
4.00s 5.042m	
J.042III	

NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check



Drawing Status PRELIMINARY

Project

School Lodge, Matson

Title

Swept path analysis Volkswagen Touran

Date 04/04/2022

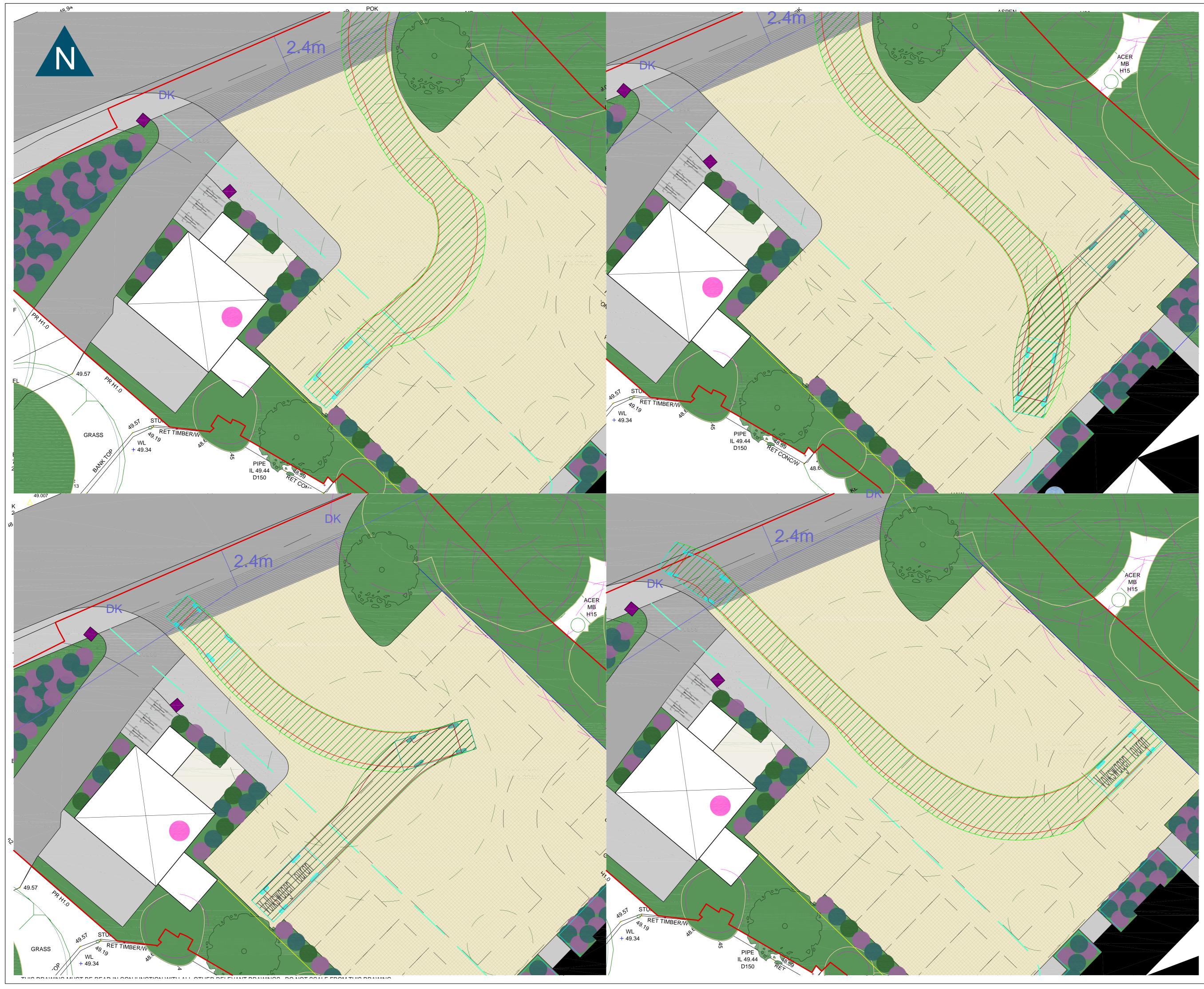
Scale	1:100@A1
Drawn	JP

Checked HLJ

Project No 19156

Client Project No

-Revision



1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

Volkswagen Touran Overall Length
Overall Length
Overall Width
Overall Body Height
Overall Body Height Min Body Ground Clearance Max Track Width
Max Track Width
Lock to Lock Time
Kerb to Kerb Turning Radius
5

4.534m 1.829m	
1.491m 0.253m 1.734m 4.00s	
5.042m	

NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check



Drawing Status
PRELIMINARY

Project

School Lodge, Matson

Title

Swept path analysis Volkswagen Touran Date 04/04/2022

Scale	1:100@A1
Drawn	JP

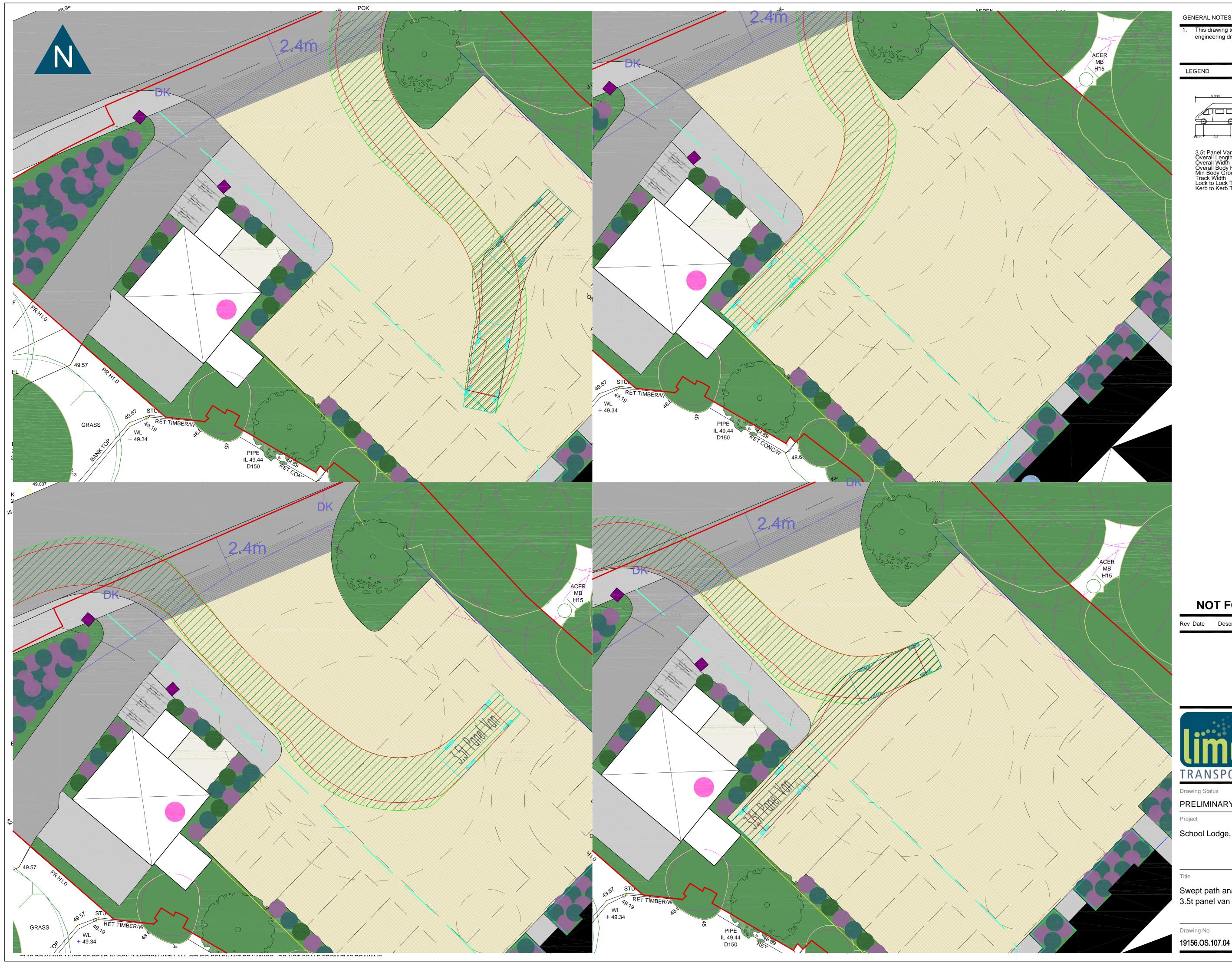
Checked HLJ Project No

19156

Client Project No

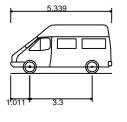
Revision

Drawing No 19156.OS.107.03



1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



3.5t Panel Van Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock to Lock Time Kerb to Kerb Turning Radius



NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check



Drawing Status PRELIMINARY

Project

School Lodge, Matson

Title

Swept path analysis 3.5t panel van

Date 04/04/2022

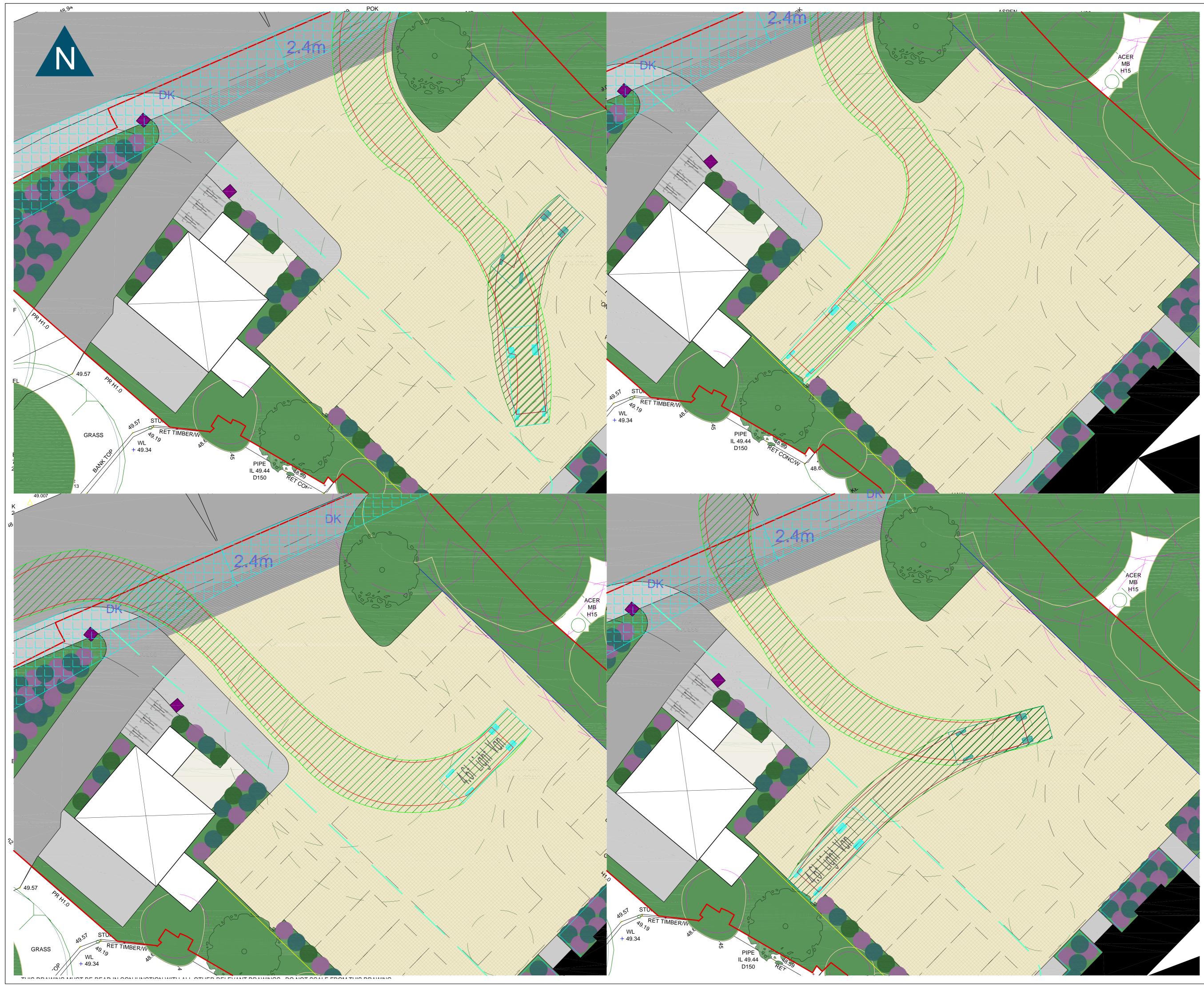
Scale	1:100@A1
Drawn	JP

Checked HLJ

Project No 19156

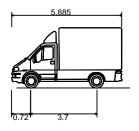
Client Project No

_____ Revision



1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



4.6t Light Van Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock to Lock Time Kerb to Kerb Turning Radius



NOT FOR CONSTRUCTION

Rev Date Description

Drawn Check



Drawing Status
PRELIMINARY

Project

School Lodge, Matson

Title

Swept path analysis 4.6t light van

Drawing No 19156.TOPO.107.08 Date 04/04/2022

Scale	1:100@A1
Drawn	JP

Checked HLJ Project No

19156

Client Project No

Revision



Appendix C



LOOAHON.		NO.					
SURVEY DATE:	03rd December 2020	DWG 1	TITLE:	ATC Location			
SURVEY TIMES:	24 Hours	JOB T	ITLE:	SS314 Gloucester			

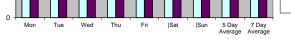
		SS314	Gloucester														
		DECEN	MBER 2020			Posted Speed					d Speed (PSL)	-	PSL) + 2 L1)		PSL+15 SL2)		
Site	Location	Lat / Long	Direction	Start Date	End Date	Limit (PSL)	Total Vehicles	5 Day Ave.	7 Day Ave.	>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%		85%ile Speed
			Eastbound	03 December 2020	09 December 2020		6393	974	913	1332	20.8	230	3.6	12	0.2	26.3	30.9
Site 1	Matson Lane, Gloucester	N51.839607 W2.220058	Westbound	03 December 2020	09 December 2020	30	7432	1146	1062	1675	22.5	293	3.9	9	0.1	26.8	31.3
			Two-Way	03 December 2020	09 December 2020		13825	2120	1975	3007	22	523	4	21	0	27	31

	SS314 Glo										ite	Site 1		Loc	ation	Matson I	ane, Glo	ucester (N	151.8396	607 W2.2	20058)	
0:	3 December	2020		to	09	9 Decen	nber 202			Dire	ction	Eastbo	und			l Limit	ACPO	(SL1)	DfT	(SL2)		
Time Period	Total Vehicles	0 10	10 15	15 20	20 25	25 30	5pe 30 35	ed Bins 35 40	5 40 45	45 50	50 55	55 60	60 65	65 130	(P 30	SL) 30	35 ACPO	35 ACPO	45 DFT	45 DFT	Mean Speed	85%ile Speed
03 Decen	nber 2020 3	0	0	0	1	0	2	0	0	0	0	0	0	0	2	66.67	0	0	0	0	28	
0100	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	100	1	100	0	0	37.7	
0200 0300	2 2	0	0 1	0	0	0 1	2 0	0 0	0 0	0 0	0	0	0	0	2 0	100 0	0 0	0 0	0	0 0	33.3 19.3	-
0400 0500	5 10	0	0	1 0	2	2 4	0 4	0	0	0	0	0	0	0	0 4	0 40	0	0	0	0	22.6 28.3	-
0600 0700	31 82	0 0	0 0	0 2	1 13	<mark>19</mark> 44	<mark>8</mark> 21	<mark>2</mark> 2	1 0	0 0	0 0	0 0	0 0	0 0	11 23	35.48 28.05	<mark>3</mark> 2	9.677 2.439	0 0	0 0	30.2 28	34.6 32.1
0800	102	0	2	26	27	36	11	0	0	0	0	0	0	0	23 11	10.78	0	0	0	0	24.2	29.4
0900	58 42	0	0	2	10 8	30 21	14 7	2	0	0	0	0	0	0	16 8	27.59 19.05	2	3.448 2.381	0	0	27.9 26.3	31.1 31.3
1100 1200	37 69	0	1 1	2 10	19 31	11 20	3 6	1	0	0	0	0	0	0	4 7	10.81 10.14	1 1	2.703 1.449	0	0	24.4 24.7	27.6 29.1
1300	54	0	3	8	13	18	10	1	1	0	0	0	0	0	12	22.22	2	3.704	0	0	25.6	31.3
1400 1500	54 73	0	1 6	10 10	15 22	23 15	4 16	1	0	0	0	0	0	0	5 20	9.259 27.4	1 4	1.852 5.479	0 1	0 1.37	24.8 25	29.5 31.4
1600 1700	72 72	0 0	1 0	10 5	16 27	22 29	21 8	2	0 0	0 0	0 0	0 0	0 0	0	23 11	31.94 15.28	2 3	2.778 4.167	0	0 0	26.2 26	31.8 30.1
1800	44	0	0	1	9	22	6	5	0	1	0	0	0	0	12	27.27	6	13.64	1	2.273	28.6	34.1
1900 2000	35 51	0	0	1	11 20	17 22	4	2	0	0	0	0	0	0	6 4	17.14 7.843	2	5.714 1.961	0	0	27 25.2	31 28.8
2100 2200	22 13	0	0	0	4	9 7	6 4	3 0	0	0	0	0	0	0	9 4	40.91	3	13.64 0	0	0	29.1 28.2	35 33.2
2300	6	0	0	0	2	2	1	1	0	0	0	0	0	0	2	33.33	1	16.67	0	0	27.8	-
07-19 06-22	759 898	0	17 17	89 95	210 246	291 358	127 148	21 29	2	2	0	0	0	0	152 182	20.03 20.27	25 34	3.294 3.786	2	0.264	25.9 26.1	30.6 30.8
06-00 00-00	917 940	0	17 18	96 97	249 254	367 374	153 161	30 31	3 3	2 2	0	0	0	0	188 197	20.5 20.96	35 36	3.817 3.83	2 2	0.218 0.213	26.2 26.2	30.9 30.9
04 Decen	nber 2020																					30.9
0000	3 1	0	0	0	2	1 0	0	0	0	0	0	0	0	0	0	0 100	0	0	0	0	23.4 30.6	-
0200 0300	1 2	<mark>0</mark> 0	0 0	0 0	0 0	0 2	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0	1 0	100 0	0 0	0 0	0 0	0 0	31.8 29.7	-
0400	4	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.4	-
0500	8 37	0	0	0	1	5 19	1 10	0	0	0	1	0	0	0	2 10	25 27.03	1	12.5 0	1	12.5 0	30.7 27.5	- 32
0700	79	0	0	3	23	34	17	1	0	1	0	0	0	0	19	24.05	2	2.532	1	1.266	27.3	31
0800 0900	87 66	0 0	4 0	20 5	24 22	30 23	8 13	1 3	0 0	0	0 0	0 0	0	0	9 16	10.34 24.24	1 3	1.149 4.545	0	0	23.6 26.4	29 31.6
<u>1000</u> 1100	42 58	0	1 3	2	5 11	27 27	7 9	0	0	0 2	0	0	0	0	7 13	16.67 22.41	0 4	0 6.897	0	0 5.172	26.9 27.6	30.3 31.7
1200	67	0	1	4	27	22	10	3	0	0	0	0	0	0	13	19.4	3	4.478	0	0	26.3	31.5
1300 1400	68 86	0	0	3 9	16 31	35 25	11 17	3	0	0	0	0	0	0	14 20	20.59 23.26	3	4.412 3.488	0	0	27.1 25.8	32.4 30.6
1500 1600	117 75	1 0	2 0	20 2	38 24	42 31	13 17	1 1	0	0	0	0	0	0	14 18	11.97 24	1	0.855	0	0	24.5 26.8	29.8 31.1
1700	63	0	1	3	14	29	12	4	0	0	0	0	0	0	16	25.4	4	6.349	0	0	26.8	31.2
<u>1800</u> 1900	61 42	0	0	3 1	15 9	23 19	16 10	3	1 0	0	0	0	0	0	20 13	32.79 30.95	4 3	6.557 7.143	0	0	27.8 28.3	31.9 32
2000 2100	33 19	0 0	1 0	1 1	12 3	<mark>8</mark> 10	<mark>9</mark> 3	<mark>2</mark> 2	0 0	0 0	0 0	0 0	0 0	0	11 5	33.33 26.32	2 2	6.061 10.53	0 0	0	26.9 27.9	31.3 34.1
2100	13	0	0	0	2	9	2	0	0	0	0	0	0	0	2	15.38	0	0	0	0	27.2	30
2300 07-19	14 869	0	0 13	1 78	1 250	6 348	4 150	2 24	0	0 3	0	0	0	0	6 179	42.86 20.6	2 29	14.29 3.337	0 4	0 0.46	28.5 26.2	35.3 31
06-22	1000	1	14	83	280	404	182	31	1	3	0	0	0	1	218	21.8	36	3.6	4	0.4	26.4	31
06-00 00-00	1027 1046	1	14 14	84 85	283 286	419 430	188 191	33 33	1 1	3 3	0 1	0	0	1	226 230	22.01 21.99	38 39	3.7 3.728	4 5	0.389 0.478	26.4 26.5	31 31
05 Decen 0000	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1	3	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.8	28.9
0100	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.6	-
0200 0300	2 0	0 0	0 0	0	1 0	1 0	0	0 0	0 0	0	0 0	0	0	0	0	0 0	0 0	0	0 0	0	25.8 -	-
0400 0500	5 4	0	0	1 0	2	2 0	0	0	0	0	0	0	0	0	0	0 25	0	0	0	0	23.9 25.4	-
0600	12	0	0	0	1	8	3	0	0	0	0	0	0	0	3	25	0	0	0	0	28.7	31.3
0700 0800	33 31	0	0	0	4	21 19	7	1	0	0	0	0	0	0	8	24.24 19.35	1	3.03 6.452	0	0	28.2 28.4	30.1 31.9
0900	49 51	0	0	2	14 15	22 26	9 4	2	0	0	0	0	0	0	11 6	22.45 11.76	2	4.082 3.922	0	0	26.7 25.9	32 29.7
1100	71	0	0	10	21	30	8	1	1	0	0	0	0	0	10	14.08	2	2.817	0	0	25.2	29.8
1200 1300	70 60	0	0 1	6 2	19 26	36 15	6 12	3 3	0	0	0	0	0	0	9 15	12.86 25	3	4.286 5	0	0	26.4 26	29.8 32.1
1400 1500	63	0	0	3	22	30 29	6 14	2 1	0	0	0	0	0	0	8 15	12.7	2 1	3.175	0	0	26.2 27	29.4 30.6
1600	61 48	0	0	1	14 14	22	10	1	0	0	0	0	0	0	11	24.59 22.92	1	1.639 2.083	0	0	26.9	30.9
1700 1800	57 54	0	1	2	28 10	19 28	6 11	1	0	0	0	0	0	0	7 13	12.28 24.07	1	1.754 3.704	0	0	24.9 27.3	29.3 31.2
1900	40	0	0	3	10	15	10	1	1	0	0	0	0	0	12	30	2	5	0	0	27.2	31.4
2000 2100	38 23	0 0	0 1	<mark>2</mark> 1	<mark>12</mark> 5	<mark>16</mark> 12	8 4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	<mark>8</mark> 4	21.05 17.39	0 0	0	0 0	0	26.4 26.4	31.4 32.1
2200 2300	24 9	<mark>0</mark> 0	<mark>0</mark> 1	2 1	<mark>4</mark> 6	14 1	4 0	0 0	<mark>0</mark> 0	0 0	<mark>0</mark> 0	<mark>0</mark> 0	0 0	0	4 0	16.67 0	0	0	0	0	26.9 22.2	30.6
07-19	648	1	5	34	192	297	97	20	2	0	0	0	0	0	119	18.36	22	3.395	0	0	26.4	30.4
06-22 06-00	761 794	1	6 7	40 43	220 230	348 363	122 126	21 21	3 3	0	0	0	0	0	146 150	19.19 18.89	24 24	3.154 3.023	0	0	26.5 26.5	30.8 30.6
00-00	819	2	12	45	238	371	127	21	3	0	0	0	0	0	151	18.44	24	2.93	0	0	26.3	30.5

	SS314 Glo		r								te	Site 1		Loc	ation	Matson L	ane, Glo	ucester (N	151.8396	507 W2.2	20058)	
03	3 December	2020		to	0'	9 Decen	ber 202	20		Dire	ction	Eastbo	und			d Limit	ACPO	(SL1)	DfT	(SL2)		
Time	Total	0	10	15	20	25	30	ed Bins 35	40	45	50	55	60	65	(P 30	SL) 30	35	35	45	45	Mean	85%ile
Period 06 Decem	Vehicles	10	15	20	25	30	35	40	45	50	55	60	65	130			ACPO	ACPO	DFT	DFT	Speed	Speed
0000	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
0100 0200	3 0	0	0	0	2 0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7	-
0300	2	0	0	0	0	1	1	0	0	0	0	0	0	0	1	50 0	0	0	0	0	29 24.4	
0500	3	0	0	0	0	2	1	0	0	0	0	0	0	0	1	33.33	0	0	0	0	29.9	-
0600 0700	8 18	0	0	0 2	0 5	3 10	5 1	0	0	0	0	0	0	0	5 1	62.5 5.556	0	0	0	0	30.1 25.2	- 28.4
0800	23	0	1	1	11	8	1	0	1	0	0	0	0	0	2	8.696	1	4.348	0	0	24.8	29.1
0900 1000	41 50	0	0	0	6 15	21 20	12 11	2	0	0	0	0	0	0	14 12	34.15 24	2	4.878 2	0	0	28.3 26.6	32.4 32.2
1100 1200	77 77	0	1 0	0 5	27 20	42 36	6 11	1 5	0	0	0	0	0	0	7 16	9.091 20.78	1 5	1.299 6.494	0	0	26.5 27.1	29.7 30.9
1300	81	0	1	3	23	33	18	3	0	0	0	0	0	0	21	25.93	3	3.704	0	0	26.8	31.4
1400 1500	57 49	0	1 0	9 2	10 12	20 29	15 6	2	0	0	0	0	0	0	17 6	29.82 12.24	2	3.509 0	0	0	26.5 26.3	31.2 29.7
1600	55	0	0	3	23	21	6	2	0	0	0	0	0	0	8	14.55	2	3.636	0	0	26.1	29.7
1700 1800	31 28	0	0	3	7	15 3	3	2	0	1	0	0	0	0	6 7	19.35 25	3	9.677 0	1	3.226 0	27.1 25.1	30.7 30.8
1900	25	0	0	0 4	12	5	7 7	1 1	0	0	0	0	0	0	8	32	1	4	0	0	27.1	31.9
2000 2100	44 12	2 0	0	4	17 4	13 6	2	0	0	0	0	0	0	0	8 2	18.18 16.67	0	2.273 0	0	0	24.6 27.1	30.5 33.6
2200 2300	7	<mark>0</mark> 0	<mark>0</mark> 0	0 0	<mark>4</mark> 0	2 2	1 0	0	0 0	0 0	0 0	<mark>0</mark> 0	0 0	0	1 0	14.29 0	0	0	0	0 0	25.6 26.9	•
07-19	587	0	5	35	172	258	97	18	1	1	0	0	0	0	117	19.93	20	3.407	1	0.17	26.6	30.7
06-22 06-00	676 685	2	5 5	39 39	205 209	285 289	118 119	20 20	1	1	0	0	0	0	140 141	20.71 20.58	22 22	3.254 3.212	1	0.148 0.146	26.5 26.5	30.8 30.8
00-00	702	2	5	40	216	296	121	20	1	1	0	0	0	0	143	20.37	22	3.134	1	0.142	26.5	30.8
07 Decem	1ber 2020 2	0	0	0	0	0	1	1	0	0	0	0	0	0	2	100	1	50	0	0	36.3	-
0100	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	•
0200 0300	2 1	0	0	0	0 1	2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.2 22.6	-
0400 0500	3 14	0	0 0	0 0	3 1	0 6	0 4	0 2	<mark>0</mark> 1	0	0	0	0	0	0 7	0 50	0 3	0 21.43	0 0	0 0	23 31.2	- 36.9
0600	28	0	0	0	4	16	6	2	0	0	0	0	0	0	8	28.57	2	7.143	0	0	29.2	33.8
0700 0800	72 93	0	0	1	9 24	40 34	21 11	1	0	0	0	0	0	0	22 12	30.56 12.9	1	1.389	0	0	28.4 24.2	31.8 29.9
0900	57	0	0	2	8	30	16	1	0	0	0	0	0	0	17	29.82	1	1.754	0	0	27.8	30.8
1000 1100	62 58	0	2	5 16	16 10	28 17	8 12	3 1	0	0 1	0	0	0	0	11 14	17.74 24.14	3 2	4.839 3.448	0	0	25.9 25.3	30.7 33.5
1200	61	0	0	5	8	31	13	3	1	0	0	0	0	0	17	27.87	4	6.557	0	0	27.9	32.1
1300 1400	72 49	0	0	8	28 17	28 14	8 13	0	0	0	0	0	0	0	8 14	11.11 28.57	0	0 2.041	0	0	25 26.6	29.6 31.2
1500	85	0	1	24	25	26	6	3	0	0	0	0	0	0	9	10.59	3	3.529	0	0	23.7	29.4
1600 1700	55 51	0	0	2	6 16	25 25	19 6	1	2 0	0	0	0	0	0	22 7	40 13.73	3 1	5.455 1.961	0	0	28.8 26.1	32.7 29.8
1800	43	0	0	2 1	11	22	5	3	0 0	0	0 0	0	0	0	8 7	18.6	3	6.977	0	0 0	26.8	31.9
1900 2000	32 46	0	0	6	18 15	6 18	7 6	0	0	0	0	0	0	0	6	21.88 13.04	0	0	0	0	25.3 24.7	31 29.8
2100 2200	18 17	0	0	1	7	10 6	0	0	0	0	0	0	0	0	0	0 11.76	0	0 5.882	0	0	24.6 25.4	28 30.1
2300	6	0	0	0	2	3	1	0	0	0	0	0	0	0	1	16.67	0	0	0	0	27	-
07-19 06-22	758 882	0	4 5	95 103	178 222	320 370	138 157	19 21	3	1	0	0	0	0	161 182	21.24 20.63	23 25	3.034 2.834	<u>1</u> 1	0.132	26.2 26.2	31.2 31
06-00	905	0	5	104	232	379	159	22	3	1	0	0	0	0	185	20.44	26	2.873	1	0.11	26.1	31
00-00 08 Decem	929 1ber 2020	0	6	104	238	387	164	25	4	1	0	0	0	0	194	20.88	30	3.229	1	0.108	26.2	31.2
0000	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.3 26.7	-
0100 0200	2	0	0	0 1	0	2 0	0	0 1	0	0	0	0	0	0	0	0 50	0	0 50	0	0	26.7 29.5	-
0300	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1 2	100 66.67	0	0	0	0	34 27.9	-
0500	13	0	0	0	3	4	1	4	0	1	0	0	0	0	6	46.15	5	38.46	1	7.692	31.4	37.6
<u>0600</u> 0700	25 71	0	0	2	1 8	12 30	7 25	3 6	0 1	0	0	0	0	0	10 32	40 45.07	3 7	12 9.859	0	0	29.1 29.2	34.8 32.2
0800	98	0	2	23	38	27	7	1	0	0	0	0	0	0	8	8.163	1	1.02	0	0	23.3	28.1
0900	48 39	0	0	3	4	27 21	11 10	3	0	0	0	0	0	0	14 10	29.17 25.64	3	6.25 0	0	0	28.1 27.7	31.6 31.2
1100	54	1	0	10	6	25	10	2	0	0	0	0	0	0	12	22.22	2	3.704	0	0	26	31.5
1200 1300	64 62	1 0	1 0	6 3	32 20	17 25	6 11	1	0	0	0	0	0	0	7 14	10.94 22.58	1	1.563 4.839	0	0	24.1 27.1	28.8 30.4
1400	71	0	0	4	20	33	12	2	0	0	0	0	0	0	14	19.72	2	2.817	0	0	26.7	30.9
1500 1600	94 69	0	1 0	26 1	37 12	22 32	7 22	1	0	0	0	0	0	0	8 24	8.511 34.78	1	1.064 2.899	0	0	23.1 28.2	28.2 33.3
1700 1800	59 44	0	2 0	2 1	9 11	32 11	13 16	1 5	0	0	0	0	0	0	14 21	23.73	1 5	1.695 11.36	0	0	27 29	31.3 34.7
1800	44 66	0	0	7	33	11 16	16 9	5 1	0	0	0	0	0	0	21 10	47.73 15.15	5 1	11.36	0	0	29 24.7	34.7 30.5
2000 2100	32 18	<mark>0</mark> 0	<mark>0</mark> 0	2 2	17 2	<mark>8</mark> 10	2 3	<mark>0</mark> 1	2 0	1 0	0 0	0 0	0	0	5 4	15.63 22.22	<mark>3</mark> 1	9.375 5.556	1 0	3.125 0	26.2 27.9	30.8 33.5
2200	20	0	1	0	6	9	4	0	0	0	0	0	0	0	4	20	0	0	0	0	25.6	30.8
2300 07-19	3 773	0	0 6	0 80	0 205	3 302	0 150	0 26	0	0	0	0	0	0	0 178	0 23.03	0 28	0 3.622	0	0	27.5 26.3	31.2
06-22	914	2	6	93	258	348	171	31	4	1	0	0	0	0	207	22.65	36	3.939	1	0.109	26.3	31.2
06-00 00-00	937 959	2	7	93 94	264 268	360 367	175 179	31 36	4	1	0	0	0	0	211 221	22.52 23.04	36 42	3.842 4.38	1 2	0.107 0.209	26.2 26.3	31.1 31.2
••			-							_		-	-	-								

	SS314 Glo	uceste	r							Si	te	Site 1		Loc	ation	Matson L	ane, Glou	ucester (N	151.8396	507 W2.2	20058)	
0	3 December	2020		to	09	9 Decen	ber 202	20		Dire	ction	Eastbo	und		•	l Limit	ACPO	(SL1)	DfT	(SL2)		
Time	Total	0	10	15	20	25	Spee 30	ed Bins 35	; 40	45	50	55	60	65	(P 30	SL) 30	35	35	45	45	Mean	85%ile
Period	Vehicles	10	15	20	25	30	35	40	45	50	55	60	65	130			ACPO	ACPO	DFT	DFT	Speed	Speed
09 Decen 0000	nber 2020 6	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.5	-
0100	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	100	0	0	0	0	33.4	-
0200 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	4 14	0 0	0	0	2	1 4	1	0	0	0	0	0	0	0	1	25	0 1	0	0	0	26.8	-
0500 0600	33	0	0	1	4	4	5 15	2	1	0	0	0	0	0	6 17	42.86 51.52	2	7.143 6.061	0	0	29 29.7	32.9 33.7
0700 0800	69 88	0	0	2 12	10 44	41 19	9 11	6 0	0	1	0	0	0	0	16 11	23.19 12.5	7	10.14 0	1	1.449 0	28.6 23.9	31.7 29.4
0900	67	0	1	0	13	40	10	3	0	0	0	0	0	0	13	12.5	3	4.478	0	0	27.1	30.6
<u>1000</u> 1100	48 60	0	0	2 7	7 15	29 27	7 9	3 1	0	0	0	0	0	0	10 10	20.83 16.67	3 1	6.25 1.667	0	0	27.5 26.4	31.1 30.5
1200	74	0	0	7	24	39	4	0	0	0	0	0	0	0	4	5.405	0	0	0	0	25.2	28.7
1300 1400	71 69	1	0	4	20 32	28 16	15 8	3	0	0	0	0	0	0	18 11	25.35 15.94	3	4.225 4.348	0	0	26.9 25	32.4 30.4
1 500	91	0	2	19	39	14	15	1	1	0	0	0	0	0	17	18.68	2	2.198	0	0	23.8	30.4
1600 1700	70 44	0	1 0	9 0	21 10	21 22	9 12	7 0	2 0	0	0	0	0	0	18 12	25.71 27.27	9 0	12.86 0	0	0	26.5 27.8	33.4 31.4
1800	38	0	0	1	14	18	5	0	0	0	0	0	0	0	5	13.16	0	0	0	0	25.9	29.6
1900 2000	54 31	0	1	4	10 5	25 17	12 4	2	0	0	0	0	0	0	14 5	25.93 16.13	2	3.704 3.226	0	0	27 25.7	31 30.6
2100	32	0	0	3	16	8	5	0	0	0	0	0	0	0	5	15.63	0	0	0	0	25.1	30
2200 2300	27 7	0	2	3 0	11 1	10 5	1	0	0	0	0	0	0	0	1 1	3.704 14.29	0	0	0	0	23.5 27.4	28.7
07-19	789	1	10	70	249	314	114	26	4	1	0	0	0	0	145	18.38	31	3.929	1	0.127	26	30.6
06-22 06-00	939 973	2	11 13	81 84	281 293	378 393	150 152	31 31	4	1	0	0	0	0	186 188	19.81 19.32	36 36	3.834 3.7	1	0.106 0.103	26.2 26.1	30.8 30.6
00-00	998	2	13	85	301	401	159	31	5	1	0	0	0	0	196	19.64	37	3.707	1	0.1	26.1	30.8
Average 0000	Day 4	0	0	0	1	1	0	0	0	0	0	0	0	0	1	13.33	0	3.333	0	0	24	-
0100	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25 44.44	0	8.333	0	0	23.6 29.3	-
0200	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	25	0	<u>11.11</u> 0	0	0	29.5	-
0400 0500	<mark>4</mark> 9	0	0	0 0	<mark>2</mark> 2	2 4	0 2	0 1	0	0	0	0	<mark>0</mark> 0	0	0 4	10 40.91	0 1	0 15.15	0 0	0 3.03	24.6 29.9	-
0600	25	0	0	1	2	13	2	1	0	0	0	0	0	0	9	36.78	1	5.747	0	0	29.9	32.9
0700 0800	61 75	0	0	2	10 25	31 25	14 8	2	0	0	0	0	0	0	17 8	28.54	3	4.717	0	0.472	28.1 24.2	31.5 29.3
0900	55	0	0	15 2	25 11	25	12	2	0	0	0	0	0	0	0 14	26.17	2	4.145	0	0	27.4	31.3
<u>1000</u> 1100	48 59	0	1	2 7	11 16	25 26	<mark>8</mark> 8	1	0	0	0	0	0	0	9 10	19.16 16.87	1	2.994 3.133	0 1	0.964	26.6 26	30.8 30.4
1200	69	0	0	6	23	29	8	2	0	0	0	0	0	0	10	15.15	2	3.527	0	0.904	25.9	30.4
1300 1400	67 64	0	1	4	21 21	26 23	12 11	2	0	0	0	0	0	0	15 13	21.79 19.82	2	3.632 3.118	0	0	26.4 26	31.1 30.6
1500	81	0	2	15	27	25	11	1	0	0	0	0	0	0	13	15.61	2	2.105	0	0.175	24.5	30
1600 1700	63 54	0	0	4	17 16	25 24	15 9	2	1	0	0	0	0	0	18 10	27.93 19.36	3 2	4.505 3.448	0	0.265	27 26.4	32 30.5
1800	45	0	0	2	12	18	9	3	0	0	0	0	0	0	12	27.56	3	6.41	0	0.321	27.4	32.1
1900 2000	42 39	0	0	2	15 14	15 15	8	1	0	0	0	0	0	0	10 7	23.81 17.09	2	3.741 2.909	0	0.364	26.5 25.6	31.3 30.1
2100	21	0	0	1	6	9	3	1	0	0	0	0	0	0	4	20.14	1	4.167	0	0	26.7	31.8
2200 2300	17 7	0	0	1 0	5 2	8	2	0	0	0	0	0	0	0	3 1	14.88 21.28	0	0.826 6.383	0	0	25.8 26.7	30.1
07-19	740	1	9	69	208	304	125	22	2	1	0	0	0	0	150	20.28	25	3.434	1	0.174	26.2	30.8
06-22 06-00	867 891	<u>1</u> 1	9 10	76 78	245 251	356 367	150 153	26 27	3	<u>1</u> 1	0	0	0	0	180 184	20.77 20.66	30 31	3.509 3.479	1	0.165 0.16	26.3 26.3	30.9 30.9
00-00 Virtual W	913	1	11	79	257	375	157	28	3	1	0	0	0	0	190	20.84	33	3.598	2	0.188	26.3	30.9
Mon	929	0	6	104	238	387	164	25	4	1	0	0	0	0	194	20.88	30	3.229	1	0.108	26.2	31.2
Tue Wed	959 998	2	7 13	94 85	268 301	367 401	179 159	36 31	4	2	0	0	0	0	221 196	23.04 19.64	42 37	4.38 3.707	2	0.209	26.3 26.1	31.2 30.8
Thu	940	0	18	97	254	374	161	31	3	2	0	0	0	0	197	20.96	36	3.83	2	0.213	26.2	30.9
Fri Sat	1046 819	1 2	14 12	85 45	286 238	430 371	191 127	33 21	1 3	3 0	1	0	0	1 0	230 151	21.99 18.44	39 24	3.728 2.93	5 0	0.478 0	26.5 26.3	31 30.5
Sun	702	2	5	40	216	296	127	20	1	1	0	0	0	0	143	20.37	24	3.134	1	0.142	26.5	30.8
5 Day Av	erage 974	1	12	93	269	392	171	31	3	2	0	0	0	0	208	21.3	37	3.8	2	0.2	26.3	31.0
7 Day Av	erage																					
[] Total Veh	913 nicles	1	11	79	257	375	157	28	3	1	0	0	0	0	190	20.8	33	3.6	2	0.2	26.3	30.9
[]	6393	9	75	550	1801	2626	1102	197	21	10	1	0	0	1	1332	21	230	4	12	0	26	31
100 -												40										
90 -										1 <u></u>			31.2	31.2	30.8	30.9	31	30.5	30.8	31.0 3	30.9	
80 - 70 -										3		30 2	_	26.3	26.	26.2		26.3 26.	-			
60 -												ſ			Ē				i r	ΤĒ		Mean
% 50 -										-		듙20 -			-							
40 -										- 3	15	-										
30 -	20.88 23.0	4 19	9.64 2	20.96 2	1.99	8.44	20.37	21.3	20.8			10										85%ile
20 -	3770	.38	3707	1.83	3728	1.02	3 124			•4	5											
0.	0.108	0,209	0.1	0.213	0.478	2 .93 0	³ 134 0.142	^{6.8} 0.2	^{8.6} 0.2			₀ ∐				, L.I.,						

10 3229 430 3707 0.1 323 3728 293 3134 5.8 0.2 5.0 2 0.2 0 0



brand <th< th=""><th></th><th>SS314 Glou</th><th>uceste</th><th>r</th><th></th><th></th><th></th><th></th><th></th><th></th><th>Si</th><th>ite</th><th>Site 1</th><th></th><th>Loc</th><th>ation</th><th>Matson I</th><th>.ane, Glo</th><th>ucester (N</th><th>151.839</th><th>607 W2.2</th><th>220058)</th><th></th></th<>		SS314 Glou	uceste	r							Si	ite	Site 1		Loc	ation	Matson I	.ane, Glo	ucester (N	151.839	607 W2.2	220058)	
Inter Note No No No No		0/1/00			to	0	9 Decen				Dire	ction	Westb	ound		-		ACPO	(SL1)	DfT	(SL2)		
Shartery 1989 Unit of a legal and a le								30	35														
1710 0	Saturday,																05			e 1	a . 1		
SNC 2 0	0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Into Into <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																							
bits 11 0 0 1 0 0 0 0	-																						
1980 197 3 3 3 3 14 1 1 0 0 0 0 1 1 1 0 0 2 0 0 0 1 </td <td>-</td> <td></td>	-																						
OPEC Set O C O O O D <td>-</td> <td></td>	-																						
1100 67 0 1 2 1 1 2 1 1 2 1 1 2 0 <td>0900</td> <td>56</td> <td>0</td> <td>2</td> <td>4</td> <td>11</td> <td>21</td> <td>16</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>18</td> <td>32.14</td> <td>2</td> <td>3.571</td> <td>0</td> <td>0</td> <td>27.2</td> <td>32.2</td>	0900	56	0	2	4	11	21	16	2	0	0	0	0	0	0	18	32.14	2	3.571	0	0	27.2	32.2
1500 64 0 0 0 1 15 2.6 2.326 0 0 0 15 2.6 17.10 0 0 0 0 0 0 0 0 0 0 0 1 17.10 0 0 0 0 1 17.10 0 0 0 0 1 17.10 0 </td <td>-</td> <td></td>	-																						
1+40 64 0 0 0 0 0 0 1 16.7 2 3.0 0 3.2 0 0 0 0 1 1 1.0 0 0 0 0 0 1 1 1.1 1.0 0	-		-												-								
1960 196 0 1 5 32 43 1 0 0 0 0 2 23.5 6 5.5 0 0 27.7 312 1100 44 0 1 0 1 1 1 0 0 0 0 0 1 2 1.5 0 <td>-</td> <td></td>	-																						
1700 44 0 1 20 1 20 1 1 0 0 0 0 1 2 5 2 1 1800 44 0 1 0 <																							
1960 41 0 1 1 8 24 5 2 0 0 0 0 0 0 0 17 777 2 4778 0 0 27.1 532 2100 20 0 1 1 1 0 <t< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td>43</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	-						43																
3500 42 0 2 1 15 16 8 1 1 0 0 0 0 10 2.81 2 10 20 <																							
2200 17 0 0 3 6 8 0 <td>2000</td> <td>42</td> <td>0</td> <td>2</td> <td>1</td> <td>15</td> <td>14</td> <td>8</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>10</td> <td>23.81</td> <td>2</td> <td>4.762</td> <td>0</td> <td>0</td> <td>26.7</td> <td>32</td>	2000	42	0	2	1	15	14	8	1	1	0	0	0	0	0	10	23.81	2	4.762	0	0	26.7	32
2200 5 0 1 0 2 2 0																							
06-02 1097 4 20 61 226 217 429 33 8 0 0 0 0 223 228.7 41 4.412 0 0 26.8 31.4 0000 1044 4 215 25 27.7 47.9 38 8 0 0 0 233 23.8 44 4.15 0 0 26.8 31.4 0000 2 0 <th< td=""><td>2300</td><td>5</td><td>0</td><td>1</td><td>0</td><td>2</td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>23.4</td><td>-</td></th<>	2300	5	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.4	-
00-00 104 4 22 62 27 437 190 36 8 0 0 0 1 500 1 4 44 44 12 0 0 26.6 31.1 0000 2 0																							
BU December 2829 DODD 2 0 0 1 0																							
OTO 2 0	-		4	22	02	270	437	199	30	0	U	U	U	U	U	243	23.20	44	4.215	U	U	20.0	31.4
0 0																							
0460 3 0	0200	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.8	
0000 14 0 1 9 2 1 0 0 0 3 1 7 7 8 0 <td>-</td> <td></td> <td>-</td>	-																						-
07:00 56 0 1 3 17 27 8 0<	0500	9	0	0	-			1	1			0	0	0	-	2	22.22		11.11	0	0	28.7	
0900 69 0 <td></td>																							
100 61 0 4 13 29 14 1 0 0 0 0 1 1339 0 0 272 218 1 1539 0 0 272 218 1 157 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 0 2 2 2 3 3 1 0	-		-												-								
1200 86 0 1 5 10 7 5 0 0 0 0 0 2 25.8 5 5.81.4 0 0 7.73 32.4 1300 106 1 9 35 43 19 1 0									1														
1300 78 0 2 6 14 33 19 4 0<																							
1900 124 0 4 21 0 0 0 0 0 1 1 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0 1 0 0 0 0 1 1 1 1 0 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td>1300</td> <td>78</td> <td>0</td> <td>2</td> <td>6</td> <td>14</td> <td>33</td> <td>19</td> <td>4</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>23</td> <td>29.49</td> <td>4</td> <td>5.128</td> <td>0</td> <td>0</td> <td>27.3</td> <td>32.1</td>	1300	78	0	2	6	14	33	19	4	0	0	0	0	0	0	23	29.49	4	5.128	0	0	27.3	32.1
1600 86 0 6 29 36 12 3 0 0 0 0 15 17.44 3 3.488 0 0 26.5 30.4 1800 79 0 0 1 20 34 19 4 1 0 0 0 30.33 2 2.062 1 1031 27.7 32.1 1800 79 0 0 1 11 5 9 0 0 0 1 0 2.062 1 0 0 0 2.06 0 0 2.063 0 <td>-</td> <td></td>	-																						
1800 79 0 0 1 20 34 19 4 1 0 0 0 24 30.8 5 6.329 0 0 22.2 21.1 1300 56 0 0 1 11 5 9 0 0 0 9 25 0 0 0 27.5 32.4 200 23 0 1 0 4 1 0 0 0 0 8 38.1 2 9.524 0 0 28.9 33.3 2200 23 0 1 0 4 0 0 0 0 0 3 16.67 0 0 0 2.224 1 0.007 2.224 1 0.007 2.224 1 0.007 2.444 1 0.082 2.6.6 31.1 06-00 1.3 1 0 0 0 0 0 0 0<	1600	86	-		6	29	36	12	3	0	0	0	0	0	0	15	17.44		3.488	0	0	26.5	30.4
2000 36 0 0 1 11 15 9 0 0 0 0 9 25 0 0 0 276 316 2100 23 0 1 0 4 10 7 1 0												1			-								
210 21 0 0 2 11 6 1 1 0 0 0 8 38.1 2 9.524 0 0 28.9 33.3 2200 23 0 1 0 4 10 7 1 0 0 0 0 0 0 0 0 0 0 28.347.8 1 4.348 0 0 28.6 30.3 07-19 1034 0 9 85 27.7 455 185 21 1 0 1 0 0 244 21 22.46 1 0.066 26.5 31 09-00 1203 0 0 88 312 538 22.5 27 2 0 1 0 0 0 255 21.2 30 2.494 1 0.083 26.6 31.1 09-0 0 0 0 0 0 0 0 2.61 1.36.7 0 0.0 2.61 1.36.7 0 0.0 2.22.20<	-														-								
2300 18 0 0 2 1 3 0 <td></td>																							
07.9 1034 0 9 85 277 455 185 21 1 0 1 0 0 0 208 20.12 23 2.224 1 0.097 26.4 308 06-00 1203 0 10 88 317 546 225 27 2 0 1 0 0 0 255 21.2 30 2.494 1 0.083 26.6 311 00-00 1222 0 1 0 0 0 2 25 27.1 30 2.494 1 0.083 26.6 311 00-00 1222 0 1 1 0 0 0 0 0 0 0 0 2.222 0 0 0 2.6.6 311 0000 9 1 3 1 0																							
06-00 1203 0 10 88 312 538 225 27 2 0 1 0 0 0 255 21.2 30 2.494 1 0.083 26.6 31.1 00-00 1222 0 1 0 0 0 2 2 2.6 31.1 0 0.0 2.2 2.0 0 0 0 2.2 0	07-19	1034	0	9	85	277	455	185	21	1	0	1	0	0	0	208	20.12	23	2.224	1	0.097	26.4	30.8
00-00 1222 0 1 0 0 261 21.36 32 2.619 1 0.082 26.6 31.1 05 December 2020 0 <td></td>																							
0000 9 1 3 1 0 2 2 0			0	10	88	317	546	229	29		0	1	0	0	0	261	21.36	32	2.619	1	0.082	26.6	31.1
0200 4 0 0 0 0 0 0 0 1 25 0 <td>0000</td> <td>9</td> <td></td> <td>-</td>	0000	9																					-
0300 3 0 0 1 2 0	-														-			-					
0500 5 0 0 1 3 0 1 0 0 0 0 1 20 1 20 0 0 0 27.7 - 0600 15 0 0 1 20 0	0300	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.4	
0600 15 0 0 1 2 9 3 0 <td></td>																							
0800 28 0 0 3 3 14 7 1 0 10 21.28 3 6.383 0 0 27.5 31.4 1000 62 0 0 1 1 0 0 0 0 0 11 1.77.4 1 1.613 0 27.7 31.7 1000 66 0 1 13 29 19 3 0 1 0 0 0 11 1.613 0 2.8 33.6 1200 73 0 2 3 1.24 2.13 0 0 0 0 26 32.91 4 5.063 0 2.8.2 33 1400 78	0600	15	0	0	1	2	9	3	0	0	0	0	0	0	0	3	20	0	0	0	0	26.8	
1000 62 0 2 15 34 10 1 0 0 0 0 0 11 17.74 1 1.613 0 2.6.8 30.6 1100 66 0 0 1 13 29 19 3 0 1 0 0 0 23 34.85 4 6.061 1 1.515 28.4 32.5 1200 73 0 2 3 12 42 13 0 0 1 0 0 0 14 19.18 1 1.37 1 1.37 27.2 30.5 1400 78 0 2 2 15 48 8 3 0 0 0 0 11 14.1 3 3.846 0 26.7 30 1500 73 0 1 1 13 31 20 3 2 0 0 0 22.5 </td <td></td>																							
1100 66 0 1 13 29 19 3 0 1 0 0 0 0 23 34.85 4 6.061 1 1.515 28.4 32.5 1200 73 0 2 3 12 42 13 0 0 1 0 0 0 14 19.18 1 1.37 1 1.37 27.2 30.5 1300 79 1 1 16 34 22 2 0 0 0 0 26 32.91 4 5.063 0 28.2 33 1400 78 0 2 2 15 48 8 3 0 0 0 0 141 13 3.846 0 0 28.7 33 1400 78 0 1 4 20 28 16 3 1 0 0 0 141 14.13 3.846 0 0 27.7 31.5 1600 71 0 1 <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-														-								
1300 79 1 1 16 34 22 2 0 0 0 0 26 32.91 4 5.063 0 28.2 33 1400 78 0 2 2 15 48 8 3 0 0 0 0 11 14.1 3 3.846 0 0 26.7 30 1500 73 0 1 4 20 28 16 3 1 0 0 0 27.4 4 5.479 0 27.7 31.5 1600 71 0 1 1 13 31 20 3 2 0 0 0 25 35.21 5 7.042 0 28.4 33.6 1700 69 0 2 12 33 17 3 0 0 0 20 29.85 3 4.478 0 28.32.2 190	1100	66	0	0	1	13	29	19	3	0	1	0	0	0	0	23	34.85	4	6.061	1	1.515	28.4	32.5
1400 78 0 2 2 15 48 8 3 0 0 0 0 0 11 14.1 3 3.846 0 0 26.7 30 1500 73 0 1 4 20 28 16 3 1 0 0 0 0 20 27.4 4 5.479 0 0 27 31.5 1600 71 0 1 1 13 31 20 3 2 0 0 0 0 25 35.21 5 7.042 0 0 28.4 33.6 1700 69 0 2 13 37 15 2 0 0 0 0 17 24.64 2 28.99 0 27.6 31.7 1800 67 0 2 12 33 17 3 0 0 0 0 29.85 3 4.478 0 28.32.2 1900 43 1 0 1			-												-								
1600 71 0 1 13 31 20 3 2 0 0 0 0 25 35.21 5 7.042 0 28.4 33.6 1700 69 0 0 2 13 37 15 2 0 0 0 0 17 24.64 2 2.899 0 0 27.6 31.7 1800 67 0 0 2 12 33 17 3 0 0 0 0 20 29.85 3 4.478 0 0 28.8 32.2 1900 43 1 0 2 14 20 4 2 0 0 0 0 6 13.95 2 4.651 0 28.8 30 2000 34 0 0 1 12 1 0 0 0 0 0 0 0 29.41 32.8 2100 20 0 0 0 0 0 0 0 0	1400	78	0	2	2	15	48	8	3	0	0	0	0	0	0	11	14.1	3	3.846	0	0	26.7	30
1700 69 0 0 2 13 37 15 2 0 0 0 0 17 24.64 2 2.899 0 0 27.6 31.7 1800 67 0 0 2 12 33 17 3 0 0 0 0 20 29.85 3 4.478 0 0 28 32.2 1900 43 1 0 2 14 20 4 2 0 0 0 0 0 6 13.95 2 4.651 0 228 32.2 1900 43 1 0 2 14 20 4 2 0 0 0 0 6 13.95 2 4.651 0 28.8 32.8 2000 34 0 0 7 11 2 0 0 0 0 0 2 10 0 0 28.1 32.8 2100 20 0 0 0 0 0 <td></td>																							
1900 43 1 0 2 14 20 4 2 0 0 0 0 0 6 13.95 2 4.651 0 0 25.8 30 2000 34 0 0 1 9 11 12 1 0 0 0 0 13 38.24 1 2.941 0 0 28.1 32.8 2100 20 0 0 7 11 2 0 0 0 0 0 13 38.24 1 2.941 0 0 28.1 32.8 2100 20 0 0 7 11 2 0 0 0 0 0 0 0 0 0 0 2.8.1 32.8 2100 18 0 0 3 10 5 0	1700	69	0	0	2	13	37	15	2	0	0	0	0	0	0	17	24.64	2	2.899	0	0	27.6	31.7
2100 20 0 0 7 11 2 0 0 0 0 0 2 10 0 0 0 26.7 29.2 2200 18 0 0 3 10 5 0 0 0 0 0 5 27.78 0 0 0 28.3 31.1 2300 11 0 1 0 1 5 3 1 0																							
2200 18 0 0 3 10 5 0 0 0 0 5 27.78 0 0 0 28.3 31.1 2300 11 0 1 0 1 5 3 1 0 0 0 0 4 36.36 1 9.091 0 0 27.7 34.2 07-19 747 1 7 24 154 368 162 23 6 2 0 0 0 193 25.84 31 4.15 2 0.268 27.5 31.7 06-22 859 2 7 28 186 419 183 26 6 2 0 0 0 217 25.26 34 3.958 2 0.233 27.4 31.7 06-00 888 2 8 28 190 434 191 27 6 2 0 0 0	-																						
07-19 747 1 7 24 154 368 162 23 6 2 0 0 0 193 25.84 31 4.15 2 0.268 27.5 31.7 06-22 859 2 7 28 186 419 183 26 6 2 0 0 0 217 25.26 34 3.958 2 0.233 27.4 31.7 06-00 888 2 8 28 190 434 191 27 6 2 0 0 0 216 25.45 35 3.941 2 0.225 27.5 31.7	2200	18	0	0	0	3	10	5	0	0	0	0	0	0	0	5	27.78	0	0	0	0	28.3	31.1
06-22 859 2 7 28 186 419 183 26 6 2 0 0 0 217 25.26 34 3.958 2 0.233 27.4 31.7 06-00 888 2 8 28 190 434 191 27 6 2 0 0 0 26 25.45 35 3.941 2 0.225 27.5 31.7	-																						
	06-22	859	2	7	28	186	419	183	26	6	2	0	0	0	0	217	25.26	34	3.958	2	0.233	27.4	31.7

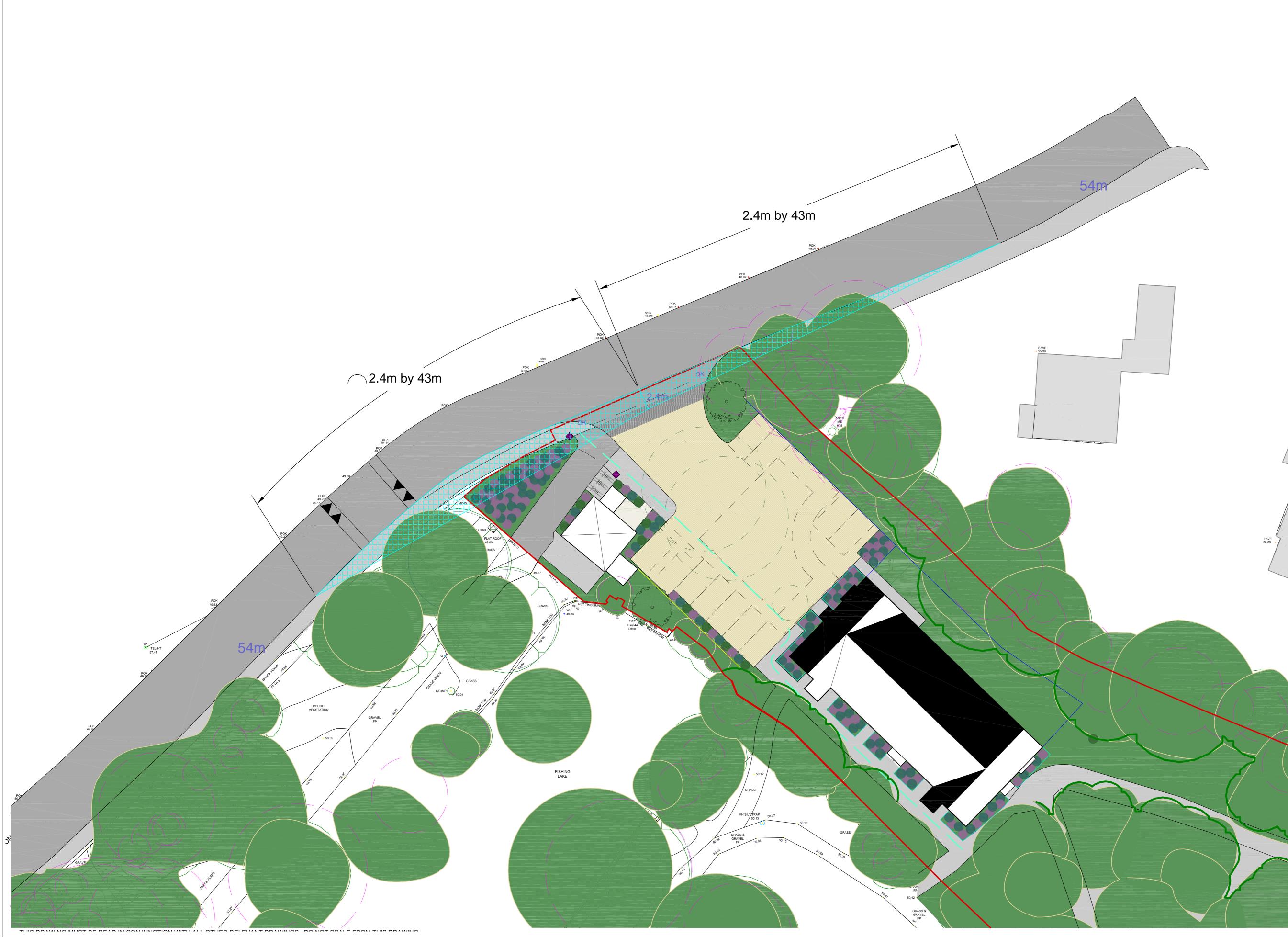
	SS314 Glou	uceste	r							Si	ite	Site 1		Loc	ation	Matson I	.ane, Glou	ucester (N	151.839	607 W2.2	220058)	
	0/1/00			to	0'	9 Decen	nber 202	20		Dire	ction	Westb	ound		-	d Limit	ACPO	(SL1)	DfT	(SL2)		
Time	Total Vehicles	0 10	10	15	20	25	30	ed Bins 35	40	45	50	55	60	65	(P 30	SL) 30	35	35	45	45		85%ile
Period 06 Decem		10	15	20	25	30	35	40	45	50	55	60	65	130	•		ACPO	ACPO	DFT	DFT	speed	Speed
0000 0100	<mark>8</mark> 5	0	0	0	1 4	5 1	2 0	0	0	0	0	0	0	0	2	25 0	0	0	0	0	29 23.6	-
0200	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.2	-
0300	4	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.5 26.2	-
0500	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.1	•
0600 0700	7 29	0	0	0 5	1 5	2 12	3 5	1	0	0	0	0	0	0	4 6	57.14 20.69	1	14.29 3.448	0	0	31.1 25.7	- 30.9
0800	32	0	0	0	5	13	10	4	0	0	0	0	0	0	14	43.75	4	12.5	0	0	29.7	34.3
0900	71	0	0	1	11	36	18	4	1	0	0	0	0	0	23	32.39	5	7.042	0	0	28.3	33.2
1000 1100	75 65	0	0	2	21 9	36 39	14 15	2	0	0	0	0	0	0	16 17	21.33 26.15	2	2.667 3.077	0	0	26.9 28.4	30.7 32.2
1200	77	0	0	1	20	36	18	1	1	0	0	0	0	0	20	25.97	2	2.597	0	0	27.5	31.5
1300 1400	68 65	1	0	1	13 5	32 37	18 18	3	0	0	0	0	0	0	21 22	30.88 33.85	3	4.412 6.154	0	0	28 28.8	32.8 32.7
1500	38	0	1	2	7	23	4	1	0	0	0	0	0	0	5	13.16	1	2.632	0	0	26.6	29.7
<u>1600</u> 1700	53 39	0	0	0	8 12	25 21	13 4	6 0	1	0	0	0	0	0	20 6	37.74 15.38	7	13.21 5.128	0	0	29.2 27.7	34.4 30.5
1800	46	0	0	0	10	23	13	0	0	0	0	0	0	0	13	28.26	0	0	0	0	28.2	32.3
1900	31	0	0	1	9	14	5	1	1	0	0	0	0	0	7	22.58	2	6.452	0	0	27.4	32.5
2000 2100	36 17	0	0	1 0	11 3	18 11	6 2	0	0	0	0	0	0	0	6 3	16.67 17.65	0	0 5.882	0	0	26.6 27.4	30.5 30.2
2200	9	0	0	0	4	4	1	0	0	0	0	0	0	0	1	11.11	0	0	0	0	25.6	-
2300 07-19	7 658	0 2	0	0 13	2 126	2 333	3 150	0 28	0 5	0	0	0	0	0	3 183	42.86 27.81	0 33	0 5.015	0	0	28.4	32
06-22	749	2	1	15	150	378	166	31	6	0	0	0	0	0	203	27.0	37	4.94	0	0	27.9	31.8
06-00	765	2	1	15	156	384	170	31	6	0	0	0	0	0	207	27.06	37	4.837	0	0	27.9	31.8
00-00 07 Decem	788 1ber 2020	2	1	15	165	396	172	31	6	0	0	0	0	0	209	26.52	37	4.695	0	0	27.8	31.8
0000	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	-
0100	2	0	0	0	0	1	1	0	0	0	0	0	0	0	1	50 0	0	0	0	0	29.6 24.6	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.0	
0400	2	0	0	0	0	0	1	1	0	0	0	0	0	0	2	100	1	50	0	0	33.3	-
0500	12 11	0	0	0	0	3	4	4	1	0	0	0	0	0	9	75 54.55	5	41.67 0	0	0	33.5 29	39.6 34.2
0700	62	3	0	0	12	37	9	1	0	0	0	0	0	0	10	16.13	1	1.613	0	0	26.6	30.6
0800 0900	133 73	1 0	12 0	17 6	46 14	43 39	12 9	1 3	1	0	0	0	0	0	14 14	10.53 19.18	2 5	1.504 6.849	0	0	23.5 27.2	28.8 31.9
1000	63	0	0	1	13	32	15	1	1	0	0	0	0	0	17	26.98	2	3.175	0	0	27.7	31.3
1100	84	0	1	8	28	32	11	4	0	0	0	0	0	0	15	17.86	4	4.762	0	0	25.9	30.5
1200 1300	73 81	0	0	4	23 20	32 47	12 8	2	0	0	0	0	0	0	14 12	19.18 14.81	2	2.74 4.938	0	0	26.5 27	30.7 30
1400	87	0	1	11	26	39	8	2	0	0	0	0	0	0	10	11.49	2	2.299	0	0	25.1	29.7
1500 1600	113 96	0	3	14 2	40	44 49	9 21	3	0	0	0	0	0	0	12	10.62	3	2.655	0	0	24.7 27	29 31.3
1700	87	0	0	1	19	39	22	4	1	1	0	0	0	0	28	32.18	6	6.897	1	1.149	28.2	31.8
<u>1800</u> 1900	73	0	0	1 6	16	40 13	13	3	0	0	0	0	0	0	16 9	21.92 26.47	3	4.11 2.941	0	0	27.7	31.5
2000	34 38	1	0	0	5	18	8	4	0	0	0	0	0	0	13	34.21	4	10.53	0	0	26.3 28.4	33.2 33.3
2100	20	0	0	0	1	13	6	0	0	0	0	0	0	0	6	30	0	0	0	0	28.6	31.7
2200 2300	21 4	0	1	0	2	11 2	7 0	0	0	0	0	0	0	0	7	33.33 25	0	0 25	0	0	27.5 28	30.3
07-19	1025	4	18	67	279	473	149	28	6	1	0	0	0	0	184	17.95	35	3.415	1	0.098	26.2	30.5
06-22	1128 1153	5 5	19	73 74	293 295	520 533	178	33 34	6 6	1	0	0	0	0	218	19.33	40	3.546 3.556	1	0.089	26.4	30.8 30.8
06-00 00-00	1174	5	20 20	74	295	535	185 191	39	7	1	0	0	0	0	226 238	19.6 20.27	41 47	4.003	1	0.087	26.4 26.5	30.8
08 Decem		0	0	0	0	2	0	0	^	0	-	0	-	0	0	0	0	0	0	0	05	
0000	5 0	0	0	0	2 0	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	-
0200	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0300 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 25	0	0	0	0	- 28.3	-
0400	9	0	0	0	0	2	3	4	0	0	0	0	0	0	7	77.78	4	44.44	0	0	33.3	-
0600	15 61	0	0	0 0	1	5 30	8	1	<mark>0</mark> 1	0	0	0	0	0	9	60 21.31	1	6.667	0	0	30.5	32.7 32.7
0700 0800	61 124	0	1	13	17 38	30 61	9 8	3	1	0	0	0	0	0	13 8	21.31 6.452	4	6.557 0	0	0	27.3 24.5	32.7 28.8
0900	79	0	0	1	17	43	14	3	1	0	0	0	0	0	18	22.78	4	5.063	0	0	27.7	32
<u>1000</u> 1100	70 60	0	0	5 5	18 17	32 27	13 9	2	0	0	0	0	0	0	15 10	21.43 16.67	2	2.857 1.667	0	0 1.667	26.6 26.3	31.1 30.6
1200	82	1	2	2	24	40	11	1	1	0	0	0	0	0	13	15.85	2	2.439	0	0	26.1	30.1
1300	57	0	1	3	13	29	10	1	0	0	0	0	0	0	11	19.3	1	1.754	0	0	26.5	30.2
1400 1500	75 118	0	1 7	6 26	25 23	31 43	9 16	3 3	0	0	0	0	0	0	12 19	16 16.1	3	4 2.542	0	0	25.5 24.4	30.5 30.4
1600	82	0	0	0	17	38	20	6	1	0	0	0	0	0	27	32.93	7	8.537	0	0	28.6	33.6
1700 1800	90 72	0	2	4	16 21	48 24	17 16	0	2	0	1	0	0	0	20 23	22.22 31.94	3	3.333 9.722	1	1.111 0	27.7 28.1	31.2 33.8
1900	64	1	0	4 5	21 14	24 31	6	5	2	0	0	0	0	0	13	20.31	7	9.722 10.94	0	0	28.1	33.8
2000	26	0	0	0	4	16	4	1	1	0	0	0	0	0	6	23.08	2	7.692	0	0	28.5	33.3
2100 2200	27	0	0	0	4	15 9	7	0	1	0	0	0	0	0	8	29.63 37.5	1	3.704 6.25	0	0	28.9 28.9	33.8 34.2
2300	7	0	0	1	1	3	1	1	0	0	0	0	0	0	2	28.57	1	14.29	0	0	27.6	-
07-19	970	2	18	69 74	246	446	152	28	7	1	1	0	0	0	189	19.48	37	3.814	2	0.206	26.4	30.8
06-22 06-00	1102 1125	3 3	18 18	74 75	269 271	513 525	177 183	35 37	<u>11</u> 11	<u>1</u> 1	<u>1</u> 1	0	0	0	225 233	20.42 20.71	48 50	4.356 4.444	2	0.181 0.178	26.6 26.7	31.1 31.1
00-00	1145	3	18	75	275	533	187	41	11	1	1	0	0	0	241	21.05	54	4.716	2	0.175	26.7	31.2

	SS314 Glo 0/1/00	uceste	r	to	00) Decem	bor 202	0			ite ction	Site 1 Westbo	und	Loc	ation	Matson I	.ane, Glo	ucester (N	151.8396	507 W2.2	220058)	
	0/1/00			10	05	Decem		ed Bins		Dire	CLION	westbo	Junu			d Limit SL)	ACPO) (SL1)	DfT	(SL2)		
Time Period	Total Vehicles	0 10	10 15	15 20	20 25	25 30	30 35	35 40	, 40 45	45 50	50 55	55 60	60 65	65 130	30	30	35 ACPO	35 ACPO	45 DFT	45 DFT		85%ile Speed
09 Decen																			a . 1	<u>.</u>		
0000 0100	3 1	0	0	0	1 0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.9 29.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 33.33	0	0	0	0	- 29	-
0500	7	0	0	0	0	4	1	2	0	0	0	0	0	0	3	42.86	2	28.57	0	0	31.4	-
0600 0700	12 61	0	0	0 6	1 9	1 34	5 10	5 1	0	0	0	0	0	0	10 11	83.33 18.03	5 1	41.67 1.639	0	0	32.3 26.8	35.9 30.5
0800	128	0	3	20	46	38	20	1	0	0	0	0	0	0	21	16.41	1	0.781	0	0	24.7	30.5
0900 1000	79 73	0	1	4	24 19	37 31	9 17	3	0	1	0	0	0	0	13 19	16.46 26.03	4	5.063 2.74	1	1.266 1.37	26.5 27.3	30.8 32.2
1100	66	0	1	2	21	26	14	2	0	0	0	0	0	0	16	24.24	2	3.03	0	0	26.9	32
1200 1300	72 71	0	0	4 5	24 21	30 36	13 7	1	0	0	0	0	0	0	14 8	19.44 11.27	1	1.389 1.408	0	0	26.3 25.8	30.6 29.5
1400	75	0	3	6	22	29	13	2	0	0	0	0	0	0	15	20	2	2.667	0	0	25.7	31.4
1500 1600	106 97	0	2	17 3	38 24	33 44	13 16	3	0	0	0	0	0	0	16 20	15.09 20.62	3	2.83 4.124	0	0	24.8 26.1	30.3 31.2
1700	81	0	1	2	19	31	24	3	1	0	0	0	0	0	28	34.57	4	4.938	0	0	28.1	33.2
<u>1800</u> 1900	85 60	0 1	1 0	2	31 15	29 29	19 10	3 4	0	0	0	0	0	0	22 14	25.88 23.33	3 4	3.529 6.667	0	0	26.7 27.5	32 32.8
2000	19	0	0	0	2	8	7	1	0	0	1	0	0	0	9	47.37	2	10.53	1	5.263	30.4	34.4
2100	20	0	0	0	6	8 13	5 4	1	0	0	0	0	0	0	6 5	30	1	5 5	0	0	28.2	32.6
2200 2300	20 5	0	0	0	1	1 <u>3</u> 3	4	0	0	0	0	0	0	0	5 1	25 20	0	5 0	0	0	28.3 28.6	<u>31.6</u> -
07-19 06-22	994	6 7	15	74	298 222	398 444	175	24	2	2	0 1	0	0	0	203 242	20.42	28	2.817	2	0.201	26.2	31.2
06-22	1105 1130	7	15 15	75 76	322 324	444 460	202 207	35 36	2	2	1	0	0	0	242	21.9 21.95	<u>40</u> 41	3.62 3.628	3	0.271	26.4 26.5	31.4 31.4
00-00	1144	7	15	76	325	469	209	38	2	2	1	0	0	0	252	22.03	43	3.759	3	0.262	26.5	31.4
Average 0000	5	0	1	0	1	2	1	0	0	0	0	0	0	0	1	18.18	0	0	0	0	25.1	-
0100	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	12.5	0	0	0	0	23.4	-
0200 0300	2	0	0	0	1 1	1 1	0	0	0	0	0	0	0	0	0	7.143 8.333	0	0 8.333	0	0	24.4 25.7	-
0400	3	0	0	0	1	1	1	0	0	0	0	0	0	0	1	44.44	0	5.556	0	0	28.9	-
0500	8	0	0	0	0	3 5	2	2	0	0	0	0	0	0	4	51.79 47.06	2	28.57 9.412	0	0	31.3 29.3	32.9
0700	51	1	0	3	12	26	8	1	0	0	0	0	0	0	9	18.31	1	2.254	0	0	26.6	30.5
0800 0900	97 68	1 0	3 0	12 3	31 15	37 35	11 11	2	0	0	0	0	0	0	13 14	13.25 21.31	2	1.767 4.852	0	0.211	24.7 27.3	29.8 31.5
1000	65	0	0	3	16	31	13	2	0	0	0	0	0	0	15	22.59	2	2.851	0	0.219	27	31.3
1100 1200	69 75	0	1	3	18 19	30 36	15 14	2	0	0	0	0	0	0	17 16	24.95 21.33	3	3.742 2.857	0	0.416	27.1 26.9	31.4 30.9
1300	70	0	1	3	16	34	14	2	0	0	0	0	0	0	16	23.27	3	3.673	0	0	27.1	31.3
1400 1500	79 94	0	1 3	6 14	21 26	36 36	12 13	2	0	0	0	0	0	0	14 15	18.23 16.19	2	3.069 2.269	0	0	26.1 25.1	30.8 30.2
1600	85	1	1	2	21	38	17	4	1	0	0	0	0	0	22	25.97	5	5.565	0	0	27.3	32.1
1700 1800	80 69	0	0	2	18 18	37 30	18 16	2	1	0	0	0	0	0	22 19	27.47 27.98	3	4.309 5.35	0	0.539	27.8 27.8	31.9 32.3
1900	47	1	0	2	11	22	7	3	0	0	0	0	0	0	10	21.82	3	6.364	0	0	27	31.8
2000 2100	33 21	0	0	1	8	14 11	8 5	1	0	0	0	0	0	0	9 6	28.57 27.59	2	4.762 4.828	0	0.433 0	27.8 28.1	32.2 32
2200	18	0	0	0	3	9	5	0	0	0	0	0	0	0	6	32.26	0	2.419	0	0	28.1	31.3
2300 07-19	8 902	0	0	0 56	1 231	4 407	2 162	0 26	0 5	0	0	0	0	0	2 194	24.56 21.49	0 32	5.263 3.518	0	0 0.127	27.4 26.6	31.1
06-22	1015	3	13	59	256	459	186	31	6	1	0	0	0	0	225	21.49	38	3.788	1	0.127	26.8	31.3
06-00 00-00	1040 1062	3	13 14	60 60	260 264	472 481	193 197	32 35	6 6	1	0	0	0	0	233 239	22.35 22.54	39 42	3.776 3.942	1	0.124	26.8 26.8	31.3 31.3
Virtual W		*	14	00	204	101	191	30	v		U	v	v	v	203	22.34	42	3.342		0.121	20.0	51.5
Mon Tue	1174 1145	5 3	20 18	74 75	297 275	540 533	<mark>191</mark> 187	39 41	7 11	1 1	0 1	0	0 0	0	238 241	20.27 21.05	47 54	4.003 4.716	1 2	0.085 0.175	26.5 26.7	30.9 31.2
Wed	1145 1144	3 7	15	76	325	469	209	38	2	2	1	0	0	0	241 252	21.05 22.03	54 43	4.716 3.759	2	0.175	26.7	31.2 31.4
Thu Fri	1044 1222	4	22 10	62 88	276 317	437 546	199 229	36 29	8 2	0	0	0	0	0	243 261	23.28 21.36	44 32	4.215 2.619	0 1	0	26.6 26.6	31.4 31.1
Sat	915	4	10	29	193	546 445	195	29 28	6	2	0	0	0	0	201	25.25	32 36	3.934	2	0.082	26.6	31.5
Sun	788 erage	2	1	15	165	396	172	31	6	0	0	0	0	0	209	26.52	37	4.695	0	0	27.8	31.8
5 Day Av	erage 1146	4	17	75	298	505	203	37	6	1	1	0	0	0	247	21.6	44	3.8	1	0.1	26.6	31.2
7 Day Av	erage 1062	4	14	60	264	481	197	35	6	1	0	0	0	0	239	22.5	42	4.0	1	0.1	26.8	31.3
Total Veh		4	14	00	204	401	19/	30	0		U	U	U	U	239	22.3	42	4.0		0.1	20.8	31.3
[]	7432	25	99	419	1848	3366	1382	242	42	6	3	0	0	0	1675	22.5	293	3.9	9	0.1	26.8	31.3
100 -										1		40										
90 -										1			30.9	31.2	31.4	31.4	31.1	31.5	31.8 3	31.2 3	1.3	
80 - 70 -										3	80 III	30 26	_	26.7	26.5	26.6	26.6 2	27.3 27.1	26.0	26.8		
60 -											·	Γ										Mean
% 50 -												튵20 -										
40 -											¹⁵	-										
30 -	20.27 21.0	5 22	.03	23.28	21.36	5.25 2	<u>6.52</u>	21.6	22.5			10										85%ile
20 -		716		1045			1605				15											
0 -	4 003 4 0 085 4	0175	3759 0,262	4 215 0	² 619 0.082	3 934 0,219	⁴ 695 0	0.1	0.1			۰ II										
-	Mon T	ue	Wed	Thu	Fri	Sat	Sun	5 Day Average	7 Day Average				/lon	Tue	Wed	Thu	Fri	Sat S	un 5 E Ave	Day 7D rage Aver	ay age	
L																						



Appendix D





GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



NOT FOR CONSTRUCTION



Drawn Check



Drawing Status PRELIMINARY

Project

School Lodge, Matson

Title

Visibility splay at the access (2.4m by 43m)

Date 04/04/2022

Scale	1:100@A1
Drawn	JP

Checked HLJ Project No

19156

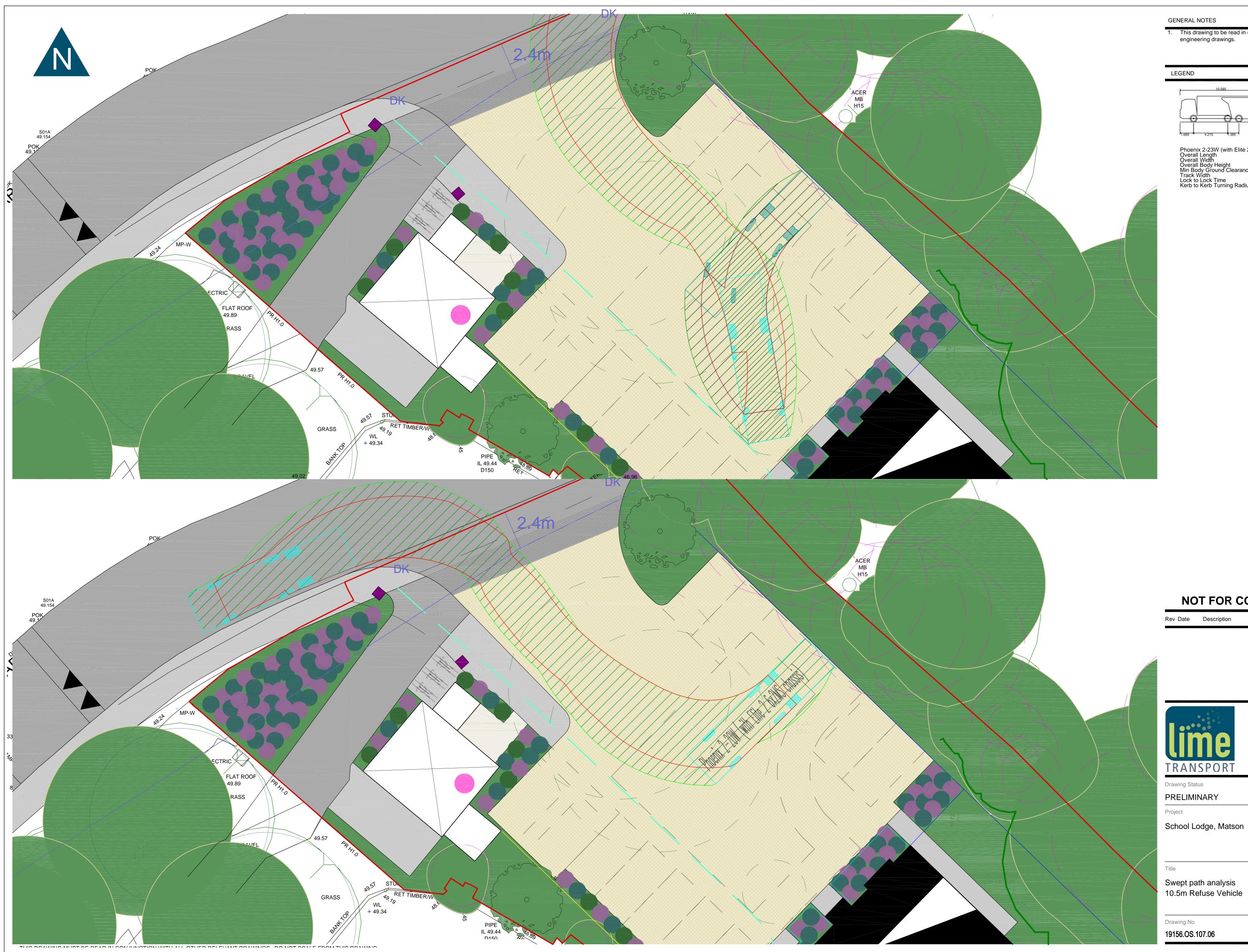
Client Project No

_____ Revision

Drawing No 19156.TOPO.107.05

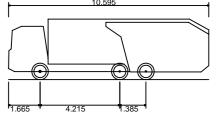
Appendix E







1. This drawing to be read in conjunction with all relevant civil engineering drawings.



Phoenix 2-23W (with Elite 2 6x4 chassis) Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock to Lock Time Kerb to Kerb Turning Radius



NOT FOR CONSTRUCTION

1100	Dale	Description

Drawn Check

10.5m Refuse Vehicle

Date 04/04/2022

Scale	1:100@A1
Drawn	JP

Checked HLJ

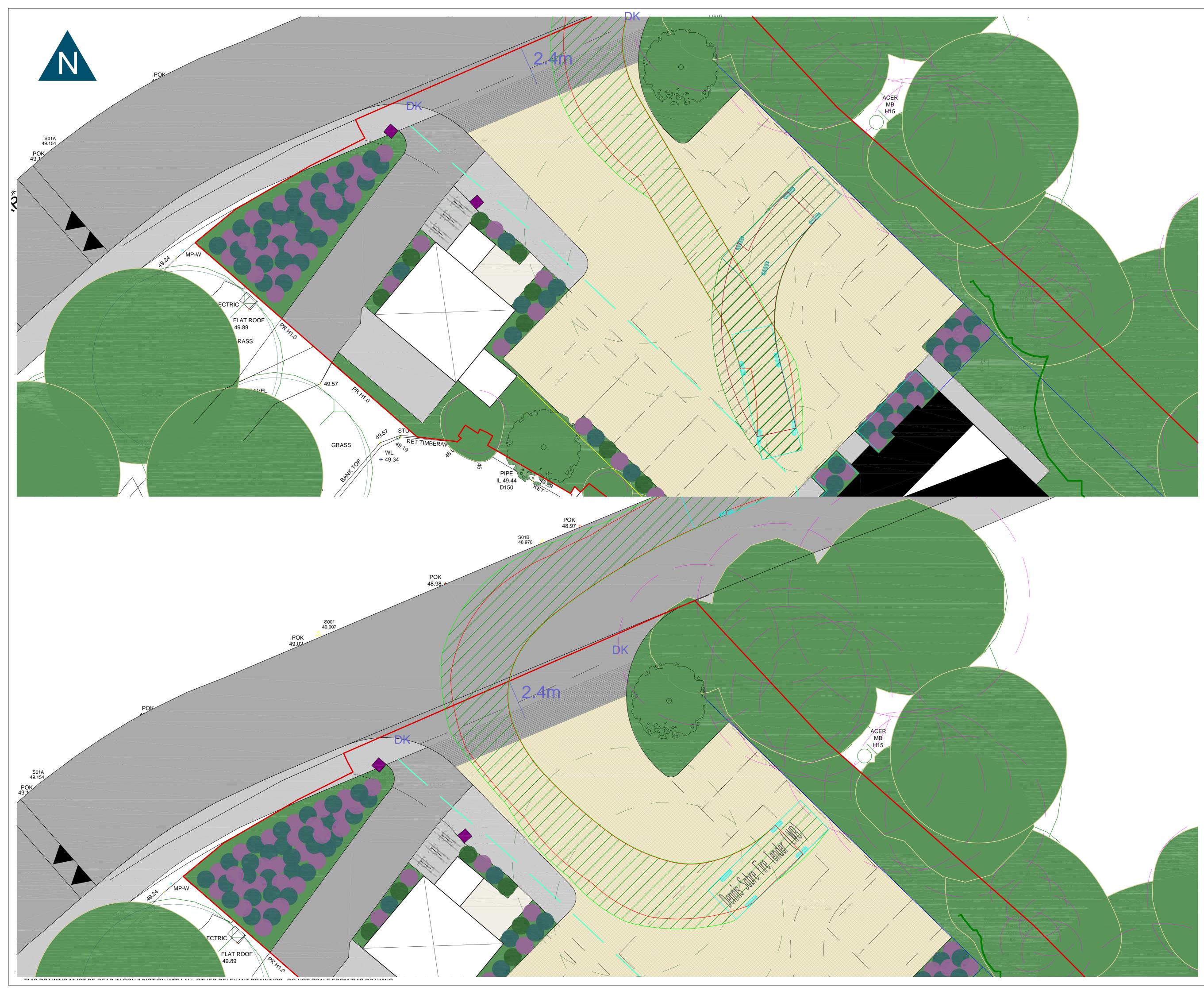
Project No 19156

Client Project No

-----Revision

Appendix F

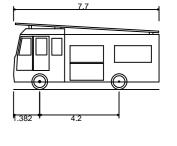




GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



Dennis Sabre Fire Tender (LWB) Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock to Lock Time Kerb to Kerb Turning Radius



NOT FOR CONSTRUCTION



Drawn Check



Drawing Status

PRELIMINARY Project

School Lodge, Matson

Title

Swept path analysis 7.7m fire tender

Drawing No 19156.OS.107.07 Date 04/04/2022

Scale 1:100@A1 Drawn JP

Checked HLJ

Project No **19156**

Client Project No

Revision



Appendix G

Calculation Reference: AUDIT-258601-191212-1211

Licence No: 258601

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL VEHICLES

Seled	cted regions and areas:	
02	SOUTH EAST	
	ES EAST SUSSEX	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
80	NORTH WEST	
	CH CHESHIRE	1 days
10	WALES	-
	CF CARDIFF	1 days

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

Secondary 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: Actual Range: Range Selected by User:	Number of dwelling 15 to 62 (units:) 6 to 191 (units:)	js
Parking Spaces Range:	All Surveys Include	ed
Percentage of dwellings priv	vately owned:	All Surveys Included

 Public Transport Provision:
 Include all surveys

Date Range: 01/01/11 to 07/10/16

~ . . .

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.

<u>Selected survey days:</u>	
Tuesday	1 days
Wednesday	1 days
Thursday	3 days
Friday	2 days

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

Selected survey types:	
Manual count	7 days
Directional ATC Count	0 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:	
Town Centre	2
Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	1

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.

Selected Location Sub Categories:	
Residential Zone	5
Built-Up Zone	2

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.

ansport Limited Stanwell Road Penarth Licence No: 25860 Secondary Filtering selection: Image: Construction of the selected set in the selected set is the selected set in the selected set in the selected set in the selected set is the selecte	7.6.3 131019 B1	19.24 Database	right of TRICS Consortium Limited, 2019. All rights reserved	Thursday 12/12/19
Secondary Filtering selection: Use Class: C3 7 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 Ubrary module of TRICS®. Population within 1 mile: 5.001 to 10,000 1 days 5.001 to 50,000 3 days 50,001 to 50,000 3 days 50,001 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 20,001 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 25,001 to 50,000 3 days 125,001 to 50,000 3 days 7/bit data displays the number of selected surveys within stated 5-mile radii of population. Car ownership within 5 miles: 0.601 to 10, 6 days 1.1 to 1.5 1 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. This data displays the number of selected surveys sites. This data displays the number of selected surveys sites. Th				Page 2
Use Cass: C3 T 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 1 mile: 5,001 to 10,000 1 days 25,001 to 50,000 5,001 to 100,000 1 days 3 days 50,001 to 100,000 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 100,001 to 125,000 25,001 to 50,000 1 days 250,001 to 500,000 25,001 to 50,000 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 6 days 1.1 to 1.5 0.6 to 1.0 6 days 1.1 to 1.5 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 6 days 1.1 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	ransport Limited	Stanwell Road	Penarth	Licence No: 258601
C3 7 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 1 mile: 5,001 to 10,000 1 days 15,001 to 50,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 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 125,001 to 50,000 2 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 1 days 125,001 to 50,000 1 days 125,001 to 50,000 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 6 days 1.1 to 1.5 1 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: <td>Secondary Filte</td> <td>ering selection:</td> <td></td> <td></td>	Secondary Filte	ering selection:		
C3 7 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 1 mile: 5,001 to 10,000 1 days 15,001 to 50,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 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 125,001 to 50,000 2 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 1 days 125,001 to 50,000 1 days 125,001 to 50,000 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 6 days 1.1 to 1.5 1 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: <td>Use Class:</td> <td></td> <td></td> <td></td>	Use Class:			
has been used for this purpose, which can be found within the Library module of TRICS®. Papulation within 1 mile: 5,001 to 10,000 1 days 15,001 to 20,000 2 days 50,001 to 100,000 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 100,001 to 125,000 2 days 100,001 to 125,000 2 days 125,001 to 50,000 2 days 125,001 to 50,000 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 6 days 1.1 to 1.5 1 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 Yes 1 days			7 days	
Population within 1 mile: 5,001 to 10,000 1 days 15,001 to 20,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 1 days This data displays the number of selected surveys within stated 1-mile radii of population. Population within 5 miles: 2 25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 500,000 1 days 250,001 to 500,000 1 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 6 days 1.1 to 1.5 1 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. 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. 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: 1 days				se Classes Order 2005
5,001 to 10,000 1 days 15,001 to 20,000 2 days 25,001 to 50,000 3 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 100,001 to 105,000 2 days 100,001 to 125,000 1 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 6 days 1.1 to 1.5 1 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. 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.	has been used fo	or this purpose, wi	hich can be found within the Library module of TRICS®.	
15,001 to 20,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 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 100,001 to 125,000 2 days 100,001 to 125,000 1 days 125,001 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 6 days 1.1 to 1.5 1 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	Population within	<u>n 1 mile:</u>		
25,001 to 50,000 3 days 50,001 to 100,000 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 100,001 to 125,000 1 days 125,001 to 50,000 1 days 125,001 to 50,000 1 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 6 days 1.1 to 1.5 1 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 Yes 1 days	5,001 to 10,000)	1 days	
50,001 to 100,000 1 days This data displays the number of selected surveys within stated 1-mile radii of population. <u>Population within 5 miles:</u> 2 25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 250,000 1 days 250,001 to 500,000 3 days This data displays the number of selected surveys within stated 5-mile radii of population. <u>Car ownership within 5 miles:</u> 0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> 1 days	15,001 to 20,000)	2 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 100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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 Yes 1 days	25,001 to 50,000)	3 days	
Population within 5 miles: 25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	50,001 to 100,00	00	1 days	
25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	This data display	is the number of s	selected surveys within stated 1-mile radii of population.	
100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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 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	Population within	n 5 miles:		
125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	25,001 to 50,00	0	2 days	
125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	100,001 to 125,0	000	1 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 6 days 1.1 to 1.5 1 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	125.001 to 250.0	000	5	
Car ownership within 5 miles: 0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days				
0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days	This data display	is the number of s	selected surveys within stated 5-mile radii of population.	
0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days	Car ownership w	ithin 5 miles:		
1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days			6 davs	
Within a radius of 5-miles of selected survey sites. <u>Travel Plan:</u> Yes 1 days				
Within a radius of 5-miles of selected survey sites. <u>Travel Plan:</u> Yes 1 days	This data display	is the number of «	selected surveys within stated ranges of average cars owned per l	residential dwelling
Yes 1 days				esidential avening,
Yes 1 days	Travel Plan [,]			
			1 days	
	No		6 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.

<u>PTAL Rating:</u> No PTAL Present

Li

7 days

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

TRICS 7.6.3 131019 B19.24	Database right of TRICS Consortium Limited, 2019. All rights reserved

Thursday 12/12/19

Licence No: 258601

Page 3

Lime Transport Limited Stanwell Road Penarth

٦

LIST OF SITES relevant to selection parameters

1	CF-03-D-01 BLOCKS OF FLATS TYN-Y-PARC ROAD CARDIFF		CARDIFF
	WHITCHURCH Neighbourhood Centre (PPS6 Local Centre) Residential Zone	24	
2	Total Number of dwellings: Survey date: FRIDAY CH-03-D-01 BLOCK OF FLATS HEATH LANE CHESTER	24 <i>07/10/16</i>	<i>Survey Type: MANUAL</i> CHESHI RE
	BOUGHTON HEATH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	30	
3	Survey date: THURSDAY ES-03-D-05 BLOCKS OF FLATS WALWERS LANE LEWES	24/05/12	<i>Survey Type: MANUAL</i> EAST SUSSEX
	Town Centre Built-Up Zone Total Number of dwellings: <i>Survey date: FRIDAY</i>	24 <i>10/10/14</i>	Survey Type: MANUAL
4	ES-03-D-06 FLATS & HOUSES WELLINGTON ROAD BRIGHTON		EAST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: THURSDAY	15 <i>16/10/14</i>	Survey Type: MANUAL
5	LN-03-D-02 FLATS ADDISON DRIVE LINCOLN		LI NCOLNSHI RE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: WEDNESDAY	22 <i>01/07/15</i>	Survey Type: MANUAL
6	NT-03-D-02 BLOCK OF FLATS WATCOMBE ROAD NOTTINGHAM CARRINGTON		NOTTINGHAMSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: TUESDAY	22 <i>23/06/15</i>	Survey Type: MANUAL
7	WK-03-D-01 BLOCKS OF FLATS QUEEN VICTORIA ROAD COVENTRY	_0,00,70	WARWICKSHIRE
	Town Centre Built-Up Zone Total Number of dwellings:	62	
	Survey date: THURSDAY	62 1 <i>7/10/13</i>	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/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI -MODAL VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.055	7	28	0.101	7	28	0.156
08:00 - 09:00	7	28	0.065	7	28	0.111	7	28	0.176
09:00 - 10:00	7	28	0.085	7	28	0.095	7	28	0.180
10:00 - 11:00	7	28	0.080	7	28	0.090	7	28	0.170
11:00 - 12:00	7	28	0.070	7	28	0.045	7	28	0.115
12:00 - 13:00	7	28	0.075	7	28	0.095	7	28	0.170
13:00 - 14:00	7	28	0.085	7	28	0.080	7	28	0.165
14:00 - 15:00	7	28	0.085	7	28	0.065	7	28	0.150
15:00 - 16:00	7	28	0.070	7	28	0.070	7	28	0.140
16:00 - 17:00	7	28	0.106	7	28	0.050	7	28	0.156
17:00 - 18:00	7	28	0.136	7	28	0.095	7	28	0.231
18:00 - 19:00	7	28	0.095	7	28	0.075	7	28	0.170
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.007			0.972			1.979

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	15 - 62 (units:)
Survey date date range:	01/01/11 - 07/10/16
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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.

Licence No: 258601

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL CYCLISTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			[DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.000	7	28	0.010	7	28	0.010	
08:00 - 09:00	7	28	0.015	7	28	0.015	7	28	0.030	
09:00 - 10:00	7	28	0.010	7	28	0.010	7	28	0.020	
10:00 - 11:00	7	28	0.010	7	28	0.000	7	28	0.010	
11:00 - 12:00	7	28	0.000	7	28	0.005	7	28	0.005	
12:00 - 13:00	7	28	0.020	7	28	0.000	7	28	0.020	
13:00 - 14:00	7	28	0.000	7	28	0.000	7	28	0.000	
14:00 - 15:00	7	28	0.005	7	28	0.000	7	28	0.005	
15:00 - 16:00	7	28	0.005	7	28	0.015	7	28	0.020	
16:00 - 17:00	7	28	0.005	7	28	0.025	7	28	0.030	
17:00 - 18:00	7	28	0.020	7	28	0.000	7	28	0.020	
18:00 - 19:00	7	28	0.000	7	28	0.000	7	28	0.000	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.090			0.080			0.170	

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.

Licence No: 258601

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL PEDESTRIANS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.015	7	28	0.030	7	28	0.045	
08:00 - 09:00	7	28	0.065	7	28	0.161	7	28	0.226	
09:00 - 10:00	7	28	0.116	7	28	0.131	7	28	0.247	
10:00 - 11:00	7	28	0.111	7	28	0.111	7	28	0.222	
11:00 - 12:00	7	28	0.116	7	28	0.131	7	28	0.247	
12:00 - 13:00	7	28	0.106	7	28	0.090	7	28	0.196	
13:00 - 14:00	7	28	0.126	7	28	0.166	7	28	0.292	
14:00 - 15:00	7	28	0.121	7	28	0.101	7	28	0.222	
15:00 - 16:00	7	28	0.226	7	28	0.146	7	28	0.372	
16:00 - 17:00	7	28	0.121	7	28	0.090	7	28	0.211	
17:00 - 18:00	7	28	0.146	7	28	0.106	7	28	0.252	
18:00 - 19:00	7	28	0.065	7	28	0.080	7	28	0.145	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			1.334			1.343			2.677	

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.

Licence No: 258601

Lime Transport Limited Stanwell Road Penarth

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.000	7	28	0.050	7	28	0.050	
08:00 - 09:00	7	28	0.005	7	28	0.015	7	28	0.020	
09:00 - 10:00	7	28	0.005	7	28	0.030	7	28	0.035	
10:00 - 11:00	7	28	0.010	7	28	0.055	7	28	0.065	
11:00 - 12:00	7	28	0.010	7	28	0.030	7	28	0.040	
12:00 - 13:00	7	28	0.015	7	28	0.030	7	28	0.045	
13:00 - 14:00	7	28	0.035	7	28	0.030	7	28	0.065	
14:00 - 15:00	7	28	0.020	7	28	0.030	7	28	0.050	
15:00 - 16:00	7	28	0.035	7	28	0.020	7	28	0.055	
16:00 - 17:00	7	28	0.060	7	28	0.040	7	28	0.100	
17:00 - 18:00	7	28	0.055	7	28	0.005	7	28	0.060	
18:00 - 19:00	7	28	0.045	7	28	0.010	7	28	0.055	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.295			0.345			0.640	

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.

Licence No: 258601

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI - MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.080	7	28	0.221	7	28	0.301
08:00 - 09:00	7	28	0.161	7	28	0.377	7	28	0.538
09:00 - 10:00	7	28	0.216	7	28	0.281	7	28	0.497
10:00 - 11:00	7	28	0.241	7	28	0.286	7	28	0.527
11:00 - 12:00	7	28	0.206	7	28	0.221	7	28	0.427
12:00 - 13:00	7	28	0.246	7	28	0.226	7	28	0.472
13:00 - 14:00	7	28	0.236	7	28	0.296	7	28	0.532
14:00 - 15:00	7	28	0.261	7	28	0.216	7	28	0.477
15:00 - 16:00	7	28	0.357	7	28	0.266	7	28	0.623
16:00 - 17:00	7	28	0.372	7	28	0.221	7	28	0.593
17:00 - 18:00	7	28	0.362	7	28	0.256	7	28	0.618
18:00 - 19:00	7	28	0.236	7	28	0.181	7	28	0.417
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.974			3.048			6.022

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.

Lime Transport Ltd 5A Andrews Buildings Stanwell Rd Penarth, CF64 2AA

www.limetransport.com

Project no.	19156
Document ref.	19156 d2d
Prepared by	HIJ
Checked by	RB
Status	Final
Date	04 April 2022



Table of contents

1	Introduction
1.1	Background3
1.2	Structure of the report
1.3	Planning history4
2	Current situation and accessibility5
2.1	Introduction
2.2	Site location
2.3	Travel characteristics
2.4	Accessibility by walking and cycling6
2.5	Accessibility by public transport
2.6	Local highway network
2.7	Personal injury collision data10
3	Development proposals
3.2	Description of development12
3.3	Pedestrian access
3.4	Vehicle access
3.5	Car parking
3.6	Access by large vehicles
4	Travel characteristics
4.1	Introduction
4.2	Trip generation17
4.3	Likely impact
5	Summary and conclusions19
5.1	Introduction
5.2	Development proposals
5.3	Trip generation
5.4	Conclusion



Figures

Figure 1.1 Site location	
Figure 2.1 Local highway network	
Figure 2.2 Local amenities within walking distance of the site	
Figure 2.3 Local cycle network	
Figure 2.4 Location of bus stops and bus routes within vicinity of the	e site
Figure 2.5 Location and severity of personal injury accidents	
Figure 3.1Development layout	

Appendices

Appendix A	Response from LHA
Appendix B	Vehicle swept path analysis: A medium sized vehicle
Appendix C	ATC survey results
Appendix D	Visibility splay at site access: 2.4m x 45m
Appendix E	Vehicle swept path analysis: 10.5m refuse vehicle
Appendix F	Vehicle swept path analysis: 7. 7m fire tender
Appendix G	TRICS 7.6.3: Affordable/local authority flats



1 Introduction

1.1 Background

- 1.1.1 Lime Transport has been commissioned by Gloucester City Homes to produce a Transport Statement in support for a planning application for the proposed re-development of land at School Lodge, Matson, Gloucestershire.
- 1.1.2 As part of the development, it is proposed to refurbish the existing lodge house to provide a community use building. In addition, the proposed development will consist of:
 - Nine one-bed flats;
 - A total of 11 car parking spaces;
 - Cycle parking for up to six cycles; and,
 - A dedicated bin storage
- 1.1.3 The site location is shown in **Figure 1.1** below.



Figure 1.1 Site location

1.2 Structure of the report

- 1.2.1 Following this introductory section, the report is structured as follows:
 - Section 2 describes the sustainability of the area and access to local facilities, including collision data;
 - Section 3 details the development proposals including the on-site layout and access arrangements along Matson Lane, together with the proposed car and cycle parking provision;



- Section 4 presents the travel characteristics of the development; and,
- Section 5 sets out the conclusions of the report

1.3 Planning history

- 1.3.1This report has been produced in response to comments received on Planning Application
19/01110/FUL, from the Local Highway Authority (See Appendix A), including:
 - 'Insufficient information has been submitted to demonstrate that safe and suitable access to the site can be achieved for all users and how users of the site can safety access public transport facilities; and,
 - Insufficient information has been submitted to demonstrate that the proposed layout gives priority to pedestrians, addresses the needs of people with disabilities and reduced mobility and minimised the scope for conflicts between pedestrians, cyclists and vehicles.'



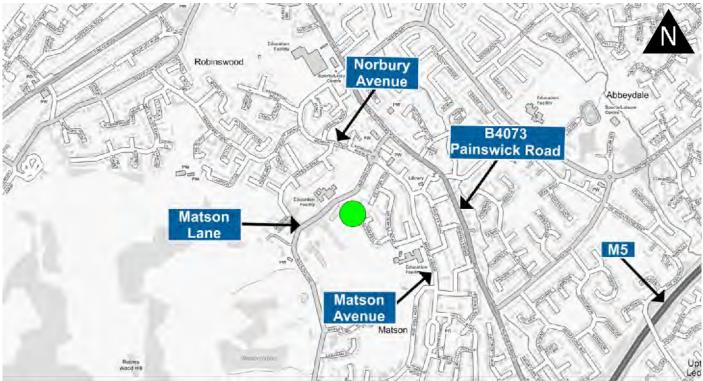
2 Current situation and accessibility

2.1 Introduction

2.1.1 This section of the Transport Statement describes the existing transport network within the vicinity of the site, detailing accessibility by walking, cycling and public transport. This section of the report also sets out the Personal Injury Collision (PIC) data to show the number and severity of accidents that have occurred within close proximity of the proposed development over the most recent 5 year period, and provides a brief description of the local highway network.

2.2 Site location

- 2.2.1 The site is located approximately 3.5km south-east of Gloucester City Centre, and is bounded by:
 - Matson Lane to the north;
 - Residential dwellings to the east and south; and,
 - A fishing lake to the west.
- 2.2.2 The location of the development site, together with the local highway network is shown in **Figure 2.1** below.



Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.1 Local highway network



2.3 Travel characteristics

2.3.1 2011 Census data has been reviewed to establish the travel characteristics of the existing residents within the vicinity of the site, including travel to work and car ownership statistics.

Travel to work

2.3.2 **Table 2.1** below provides a summary of the travel to work mode split for the lower super output area (LSOA 011B) in which the site is located, the middle super output area (MSOA 011), and Gloucestershire County Council (district). The data presented below excludes those that work from home and those not in employment.

	Mode split (%)				
Mode	011B (LSOA)	011 (MSOA)	Gloucestershire County Council (District)		
Car driver	71	66	67		
Car passenger	7	8	6		
Bus	10	11	8		
Train	1	1	1		
Motorcycle	2	2	1		
Cycle	4	5	5		
Walk	5	7	12		
Other	1	1	1		

 Table 2.1
 Travel to work mode split based on 2011 Census data

2.3.3 It can be seen from the table above that 71% of the residents who live within the lower super output area (within which the site is located) use the car (as driver) as the preferred mode of transport to travel to work, with a further 7% travelling as passenger. It can also be seen that 10% of residents travel by bus and 9% either walk or cycle to work.

Car ownership

- 2.3.4 The car or van availability in Gloucestershire County Council as a whole is 1.2 vehicles per household. The car or van availability for family houses is 1.22, and flats/masionettes or apartments 0.59 for.
- 2.3.5 Census data also shows that 82% of the dwellings located in the lower output area are houses, with flats or maisonettes constituting only 18% of all dwellings. Of those living in flats or maisonettes, within the lower area (in which the site is located), 96% have access to one car or fewer, with an average car or van availability of 0.43.

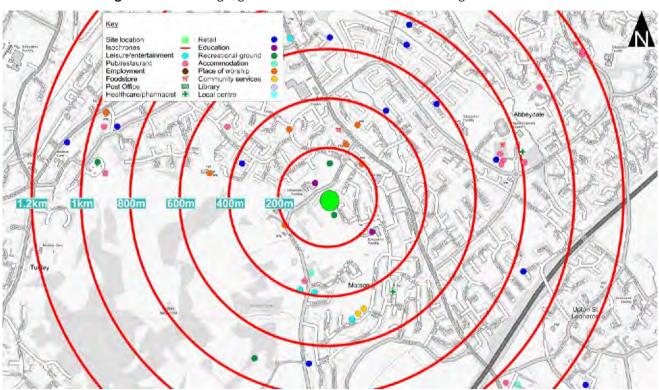
2.4 Accessibility by walking and cycling

2.4.1 Walking can provide health, economic and environmental benefits. It is considered that the site is accessible by walking, cycling and public transport, as described in the following paragraphs.



Walking

2.4.2 The Chartered Institution of Highways and Transportation (CIHT) guidelines 'Providing for Journeys on Foot' indicates that the desirable walking distance for commuting and school journeys is 500m, the acceptable walking distance is 1km, and 2km is the preferred maximum. The CIHT guidelines indicate that the desirable walking distance for 'Elsewhere', including local amenities, is 400m, the acceptable walking distance is 800m and 1.2km is the preferred maximum.



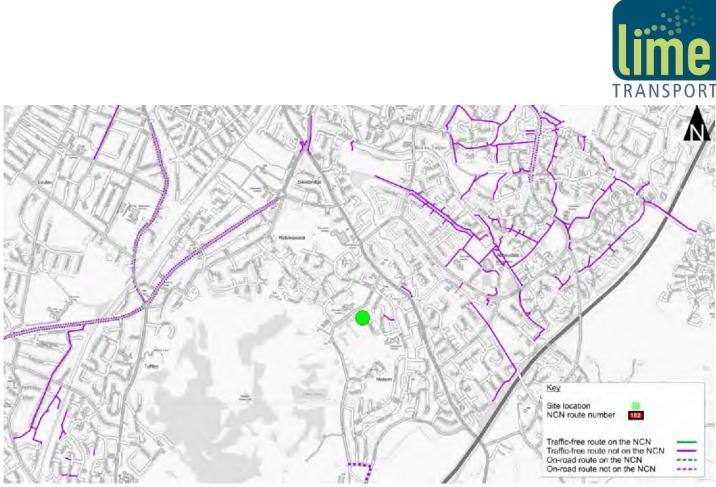
2.4.3 **Figure 2.2** below highlights the local amenities within walking distance of the site.

Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.2 Local amenities within walking distance of the site

Cycling

2.4.4 There are a number of local cycle routes within close proximity of the site that provide on-road cycle routes to Gloucester City Centre and the surrounding area. The location of the local on-road and off-road cycle routes within close proximity of the site is shown in Figure 2.3 below.



Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.3 Local cycle network

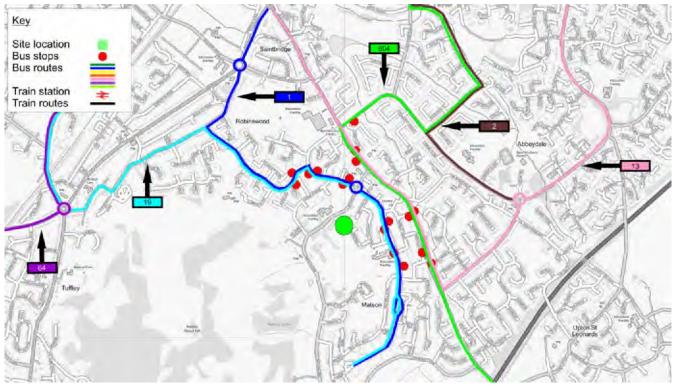
2.5 Accessibility by public transport

Bus services

2.5.1 **Figure 2.4** below highlights the bus routes within the vicinity of the site, and **Table 2.2** provides details of the services that stop at the two closest bus stops. The closest bus stop is located along Norbury Avenue, which provides connections to Gloucester City Centre every 10 minutes.







Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.4 Location of bus stop and bus routes within vicinity of the site

Route No.	Distance (m)	Route	Frequency per hour (Monday - Friday)
Norbury	y Avenue		
1	300	Gloucester – Robinswood – Matson – Robinswood – Gloucester	Every 12 minutes
Painswi	ck Road		
13	440	Gloucester – Wheatway	One an hour 9am-2pm

Table 2.2 Summary of the main bus routes serving the bus stations

2.5.2 It can be seen from the information presented above that there is a number of bus services within easy walking distance of the site, which provides convenient access to Gloucester City Centre.

Rail services

2.5.3 Gloucester Train Station is the closest train station, located approximately 3.5km northwest of the site. Gloucester Train Station is managed by Great Western Railways and provides regular connections to Cheltenham and Nottingham to the north, Cardiff Central, Maesteg, Fishguard Harbour to the south, and London Paddington to the east.



- 2.5.4 There are approximately six trains an hour depart from Gloucester Railway Station throughout the day (7am-7pm), with a journey time of approximately 1 hour to Cardiff Central, approximately 2 hours to London Paddington, and approximately two and a half hours to Nottingham. Gloucester train station is accessible by bus with a journey time of approximately 22 minutes.
- 2.5.5 Gloucester Train Station has car parking for up to 244 vehicles, which is located to the east of the station and is accessible via the A430, Station Approach. The car park is managed by APCOA Parking which operates a Pay and Display system all day Monday Sunday, with a parking tariff of £5.80 per day.
- 2.5.6 Sheltered cycle storage is available at Gloucester Train Station, which is located on Platform 2.

2.6 Local highway network

2.6.1 The local highway network in the vicinity of the site is shown in Figure 2.1 above and is described in **Table 2.3** below.

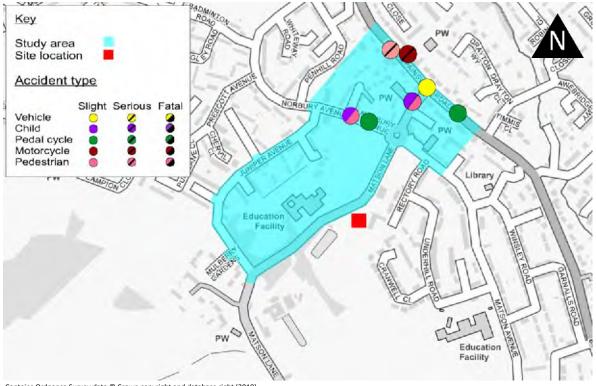
Description						
Matson Lane						
	Single carriageway rural road providing connections to					
Description	Winnycroft Lane to the south and Norbury Avenue/ Matson					
	Avenue to the west.					
Width	6m					
Speed limit	20mph adjacent to site access					
Street lighting	Yes					
Pedestrian facilities	Pedestrain footways located on both sides of the carriageway					
Peuestian lacinties	from Norbury Avenue/ Matson Avenue past the site access					
Bus route	No					
	Generally semi-rural in appearance with the presence of some					
Character	residential dwellings and Moat Primary School fronting the					
	road					
On street parking	Double yellow lines are located along the east side of the					
On-street parking	carriageway					

Table 2.3 Description of local highway network

2.7 Personal injury collision data

2.7.1 Personal injury collision data has been obtained for the most recent 5-year period (2016 to 2020 inclusive). **Figure 2.5** below shows the number of collisions within the study area surrounding the site and the severity of the collisions presented in **Table 2.4**.





Contains Ordnance Survey data © Crown copyright and database right (2019)

Figure 2.5 Location and severity of personal injury collisions

Voor	Personal injury		No. of	Collisions involving vulnerable users			le users	
Year	Fatal	Serious	Slight	casualties	Cyclist	Child	m/cyclist	Pedestrian
2016	0	0	3	4	2	1	0	0
2017	0	1	1	2	0	0	1	1
2018	0	0	0	0	0	0	0	0
2019	0	0	1	1	0	1	0	1
2020	0	1	0	1	0	0	0	1
Total	0	2	5	8	2	2	1	3

Table 2 A	Summary of	norconal	iniur	, collision	data
1 UDIE 2.4	Summury Oj	personui	mjury	COMSION	uutu

2.7.2 It can be seen from the table above that a total of seven collisions have occurred within close proximity of the site over the past five years. Of these collisions:

- five resulted in slight injuries being sustained; and,
- two resulted in serious injuries being sustained by vulnerable users, with:
 - one involving a motorcyclist
 - one involving a pedestrian
- 2.7.3 Due to the size of the development and the low level of vehicle trips likely to be generated, it is considered that the development will have a minimal impact on the highway network and, therefore, is unlikely to have an adverse impact on road safety.



3 Development proposals

3.1.1 This section of the Transport Statement describes the development proposals with regard to the access arrangements for cars, refuse, emergency vehicles, delivery and servicing vehicles, together with the car and cycle parking provision.

3.2 Description of development

- 3.2.1 As part of the planning application, it is proposed to refurbish the existing lodge to provide a community use building, which will be available for use/hire by residents of the proposed development, as well as the wider community. In addition, it is proposed to provide:
 - Nine no. 1-bed flats in a purpose-built building at the rear of the site;
 - A total of 11 car parking spaces (of which two will be accessible parking spaces);
 - On-site bin storage; and,
 - Three Sheffield stands/six cycle spaces.



3.2.2 The site layout is show in **Figure 3.1** below.

Figure 3. 1 Development layout



3.3 Pedestrian access

- 3.3.1 Pedestrian access to the proposed development will be gained via the existing footway along the southern edge of Matson Lane (to the north), which leads to a shared surface style street design.
- 3.3.2 There is also an existing pedestrian link to Painswick Park, which is located immediately north of the retained lodge building, as well as footpaths leading to the park to the south-east of the proposed residential building.

3.4 Vehicle access

- 3.4.1 Vehicles will gain access to the parking court via the existing access from Matson Lane to the north. Parking for the proposed development will be provided in the parking court, which will be located in the centre of the site (between the retained building and the proposed residential building).
- 3.4.2 A vehicle swept path analysis has been carried out which shows that a medium sized vehicle can access the site and manoeuvre throughout the parking court, exiting in a forward gear (**Appendix B**).

Visibility splay

3.4.3 In order to determine the required visibility splays at the site access, an Automatic Traffic Count (ATC) survey was undertaken along Matson Lane, in the vicinity of the site access, between 3rd to the 9th December 2020. The results of the surveys are presented in full in **Appendix C**, and the 85th percentile speeds recorded during the survey are summarised in **Table 3.1** below.

Date	Day of the week	eastbound	westbound
3 rd December	Thursday	30.9	31.4
4 th December	Friday	31	31.1
5 th December	Saturday	30.5	31.5
6 th December	Sunday	30.8	31.8
7 th December	Monday	31.2	30.9
8 th December	Tuesday	31.2	31.2
9 th December	Wednesday	30.8	31.4
5-day (weekday)		31.0	31.2
7-day (week)		30.9	31.3

Table 3.1 ATC survey results

- 3.4.4 Based on the above, the required Stopping Sight Distance (SSD) in both directions is as follows:
 - 45m SSD to the west of the site access; and,
 - 45m SSD to the east of the site access.



3.4.5 The required visibility splays at the proposed site access, are presented in **Appendix D.** It can be seen that the required visibility splays can be achieved to the east and west of the access, within land owned by the applicant or within public highway.

3.5 Car parking

3.5.1 **Table 3.1** below sets out the required parking standards for the proposed development of nine one dwellings as set out in Gloucester Local Transport Plan 2011-2026 (2010).

 Table 3.1 Car parking standards: Gloucester Local Transport Plan 2011-2026 (2010)

Type of development	Residential	Visitors	Car parking requirement
C3 Dwelling	1.5 space per	0.2 spaces per	15
house/ flats	dwellings (average)	dwelling	

- 3.5.2 As outlined above, it is proposed to provide nine residential parking spaces, and a further two spaces for visitors to either the residential dwellings or the community use facility, which is below the maximum standards outlined in Table 3.1 above.
- 3.5.3 However, it is recognised that parking standards are guidelines that form a consistent basis for discussion between developers applying for permission and the Local Planning Authority. It is recognised that situations arise where local circumstances justify a variation from the standards. It is important to consider local car ownership data, access to local facilities and the availability of alternative means of travel when determining the appropriate level of parking.
- 3.5.4 Gloucester Local Transport Plan (2010) states that 'the proposed standards are maxima, the great majority of new developments will provide less than the maximum permitted level of car parking, and in many cases much less'.
- 3.5.5 The Gloucester Local Transport Plan (2010) recognises that the parking requirement can vary depending on the size and tenure of a development. As presented in the Gloucester Local Transport Plan (2010) '*Residential Car Parking Research (DCLG, May, 2007), has identified that the following factors has a significant influence on car ownership and car parking demand:*
 - Dwelling size, type and tenure;
 - Dwelling location; and,
 - Availability of allocated and unallocated parking standards'
- 3.5.6 The following paragraphs set out policy, car ownership statistics based on housing type and tenure, as well as a description of the site's sustainability.



National policy

- 3.5.7 Parking standards should take account of local factors and sustainability issues and aim to achieve a common approach to parking provision. The rationale is to achieve sufficient parking to avoid the need for vehicles to park on-street, and potentially cause obstruction, congestion, danger and visual intrusion.
- 3.5.8 The National Planning Policy Framework (2021) states that local parking standards for residential development should take into account:
 - The accessibility of the development;
 - The type, mix and use of development;
 - The availability of and opportunity for public transport; and,
 - Local car ownership levels.

Site's sustainable location

3.5.9 The site is located within Gloucester City Council, with close proximity to a range of local services and public transport facilities.

Housing type and tenure

- 3.5.10 The proposed development will consist of one-bed flats, all of which will be affordable, and it is considered that current parking standards do not reflect the type, tenure or size of a development. There is significant evidence to show that, typically, affordable housing has a lower car ownership than private housing. Furthermore, one-bed flats have a lower car ownership than family houses.
- 3.5.11 The car ownership data for affordable housing in the area is considerably lower than all housing at only 0.43 cars per dwelling. This ownership level would generate a demand for four car parking spaces.

Availability of unallocated parking spaces

3.5.12 It should be noted that none of the 11 spaces on site will be allocated, which is more flexible and efficient in terms of the land use. Unallocated parking accommodates different levels of car ownership across households and usage patterns across the day for different uses. It is anticipated that the provision of 11 car parking spaces will accommodate the potential demand for parking.

Summary

3.5.13 It is, therefore, considered that the provision of nine car parking spaces and a further two visitor spaces (for visitors to either the residential dwellings or community use building) is appropriate, whilst using land efficiently.



3.6 Access by large vehicles

Refuse

- 3.6.1 As part of the development, it is prosed to provide a dedicated refuse bin storage on site. Refuse will be collected on site, with refuse vehicles accessing the development via Matson Lane. A swept path analysis has been carried out to show a 10.5m refuse vehicle can safely access the development, manœuvre within the turning head, and exit in a forward gear. This is shown in **Appendix E**.
- 3.6.2 The bin store will be located within the recommended walk distance for both residents and refuse operatives.

Emergency vehicles

3.6.3 As part of the development, all flats will be fitted with a sprinkler system. A swept path analysis has been carried out which shows that a 7.7m fire tender can successfully access and manoeuvre throughout the site (as shown in **Appendix F**).

Delivery and servicing

3.6.4 It is anticipated that delivery and servicing vehicles can access the site via Matson Lane (to the north) and park on-site. Due to the size of the development, it is likely that the number of deliveries will be low. Furthermore, there is sufficient parking onsite to accommodate any occasional deliveries to either the residential or the community uses.



4 Travel characteristics

4.1 Introduction

- 4.1.1 In order to assess the impact of the proposed development on the existing highway network, it is necessary to estimate the number of person trips generated by the proposed use. This section outlines the methodology used to predict the person trip generation (by mode), based on a review of the TRICS 7.6.3 trip generation database.
- 4.1.2 It should be noted that the community use building is considered ancillary to the residential dwellings, and as such it is unlikely to be a primary trip attractor. Therefore, for the purposes of this assessment, any person trips generated by the community use building have been ignored.

4.2 Trip generation

- 4.2.1 In order to predict the number of trips generated by the proposed development of nine affordable (one-bed) flats, sites have been selected on the basis of the following criteria:
 - Land use: Residential; Affordable/local authority flats;
 - Survey type: Multi-modal;
 - Survey days: Tuesday Friday;
 - Number of dwellings (range selected by user): 6 to 191;
 - Number of dwellings (actual range): 15 to 62;
 - Location of selected sites: Town Centre, suburban area, neighbourhood centre; and,
 - Geographical areas: UK (excluding London, Northern Ireland and Republic of Ireland).
- 4.2.2 Due to the nature of the development and the location of the site, a limited number of suitable sites were available. A total of seven sites were selected, with the data summarised in **Table 4.1** below and presented in full in **Appendix G**.



Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total no. of trips							
Total perso	ns												
8am-9am	0.161	1	0.377	3	0.538	5							
5pm-6pm	0.362	3	0.256	2	0.618	6							
7am-7pm	2.974	27	3.048	27	6.022	54							
Pedestrians													
8am-9am	0.065	1	0.161	1	0.226	2							
5pm-6pm	0.146	1	0.106	1	0.252	2							
7am-7pm	1.334	12	1.343	12	2.677	24							
Cyclists													
8am-9am	0.015	0	0.015	0	0.03	0							
5pm-6pm	0.02	0	0	0	0.02	0							
7am-7pm	0.09	1	0.08	1	0.17	2							
Public trans	port users												
8am-9am	0.005	0	0.015	0	0.02	0							
5pm-6pm	0.055	1	0.005	0	0.06	1							
7am-7pm	0.295	3	0.345	3	0.64	6							
Vehicles													
8am-9am	0.065	1	0.111	1	0.176	2							
5pm-6pm	0.163	1	0.095	1	0.231	2							
7am-7pm	1.007	10	0.972	9	1.979	18							

Table 4.1 Total trip generation - nine affordable flats

- 4.2.3 It can be seen from the table above that the proposed development is likely to generate up to two vehicle movements (two-way) in both the morning and evening peak periods, with a total of 18 vehicle movements (two-way) throughout the day.
- 4.2.4 It can also be seen from the table above that:
 - Walking is likely to be the preferred mode of transport, representing approximately 44% of total daily trips (as the primary mode) and a further 11% as part of a public transport trip; and,
 - Vehicles are the second most popular mode of transport, representing 33% of total daily trips.

4.3 Likely impact

4.3.1 Based on the likely volume of vehicle trips, outlined in Table 4.1 above, it is considered that the proposed development of nine affordable dwellings (and community use building) can be accommodated on the surrounding highway network.



5 Summary and conclusions

5.1 Introduction

5.1.1 Lime Transport has been commissioned by Gloucester City Homes to produce a Transport Statement in support of a planning application for the re-development of School Lodge, Matson, Gloucestershire.

5.2 Development proposals

- 5.2.1 As part of the planning application, it is proposed to refurbish the existing lodge to provide a community use building, which will be available for use/hire by residents of the proposed development as well as the wider community, and to provide:
 - Nine no. 1-bed flats in a purpose-built building at the rear of the site;
 - A total of 11 car parking spaces (of which two will be accessible parking spaces);
 - On-site bin storage; and,
 - Three Sheffield stands/six cycle spaces.
- 5.2.2 The site is located within Gloucester City Council, and is in close proximity of a range of local services and public transport facilities. The development will consist of 100% affordable units, therefore, based on the tenure and location of the site it is likely that the car ownership associated with the development will be relatively low.

Vehicle parking

- 5.2.3 As part of the development, it is proposed to provide a total of 11 car parking spaces, which is considered sufficient based on the type, size, tenure and location of the development. The site is well-connected, with access to a range of local amenities and public transport facilities. A swept path analysis has been carried out which shows that a medium sized car can access the parking spaces, manoeuvre within the parking court and exit in a forward gear.
- 5.2.4 Vehicles will access the site via the existing site access from Matson Lane to the north. The required visibility splays at the access (based on the results of the ATC survey) can be achieved in both directions.

Refuse

5.2.5 Refuse storage bins will be provided on site for residents to dispose of their waste and will be collected by the Local Authority as part of an existing collection. A refuse vehicle swept path analysis has been carried out, which shows that a 10.5m refuse vehicle can safely access the development, manoeuvre within the turning head provided, and exit in a forward gear.



Emergency services

5.2.6 As part of the development, all flats will be fitted with a sprinkler system. A swept path analysis shows that a 7.7m fire tender can successfully access and manoeuvre throughout the site.

Delivery and servicing

5.2.7 It is anticipated that deliveries and servicing vehicles can gain access to the development and park onsite. Due to the size of the development, it is likely that the number of deliveries will be low. Furthermore, there is sufficient parking onsite to accommodate any occasional delivery vehicles.

5.3 Trip generation

- 5.3.1 It is predicted that the proposed development will generate a total of two vehicle movements (two-way) in the morning peak and evening peak periods. Walking is likely to be there preferred mode of transport.
- 5.3.2 Based on the likely volume of vehicle trips, outlined above, it is considered that the proposed development of nine affordable dwellings (and community use building) can be accommodated on the surrounding highway network.

5.4 Conclusion

5.4.1 It is considered that the proposed development of nine affordable units, and community use building, will have a minimal impact on the surrounding transport network in terms of capacity and safety and can be accommodated easily within the existing highway network.



Appendices



Appendix A

		Hi	ighwa	iys	Devel	opr	nent	Glo	ement ire Hall ucester _1 2TH				
Gloucester City Planning Shire Hall Westgate Street Gloucester GL1 5TG	Council												
Our Ref: G/2019/04	43899	Your Ref: 19/0 ⁻	1110/Fl	JL			Date 2019	: 25 Novem	ber				
Proposal:	units (including comprising 9nd conversion of t lodge (curtilage building) to 1nd space, landsca	elopment of 10 res 3 storey building 5. 1 bedroom flats the existing curtila e to Grade 2 listed 5. 2 bedroom hou aping, sustainable rking and associa	g age liste d se), ope e drainag	ed Received date: 4 Novem					er 2019				
Recommendatio	No ob	ojection			No obje		n <u>(</u> Sub itions)	ject to					
n:		fusal	X		Furth	ner ir	ation	X					
Document(s), drawing(s) and reference(s):	 Plannin Design Road \$ 5591-F 5591-F 			h	Further i Planning history ref(s):		_						

	The Highway Authority recommends that this application be refused for the following reasons:-										
Details of	 Insufficient information has been submitted to demonstrate that safe and suitable access to the site can be achieved for all users and how users of the site can safely access public transport facilities. 										
recommendation :	 Insufficient information has been submitted to demonstrate that the proposed layout gives priority to pedestrians, addresses the needs of people with disabilities and reduced mobility and minimises the scope for conflicts between pedestrians, cyclists and vehicles. 										
	More favourable consideration may be given if the above issues raised can be addressed and accord with section 9 of the NPPF. The above points have been										
	expanded on within the email s	ent directly to the LPA on the 13 th Novem	ber 2019.								
	ITU	Highways Records									
Required	Rd Safety	Fire Service									
consultation:	PROW	Structures									
	LHM	Police									

Sent: 13 November 2019 20:32

Subject: Application Number 19/01110/FUL at The School Lodge 1 Matson Lane Gloucester GL4 6DX

Hi

Ref the above application, please find my initial comments below:

Road Safety Audit

Designers response and exception report (if applicable) required.

Below are comments on each point raised by the auditor that require addressing, most of which were initially raised through all previous pre-application correspondence.

- 2.1.1 Continuation of vehicular cross over is required to ensure pedestrian priority is maintained.
- 2.2.1 SPA required.
- 2.2.2 Relocate residential dwelling (School Lodge) parking away from site access.
- 2.2.3 Surface water drainage plan required.
- 2.2.4 Public utilities / services apparatus plan required.
- 2.2.5 Tracking should be provided demonstrating a refuse vehicle passing a private estate throughout the layout including within turning heads with 500mm clearance to boundaries (vertical kerb-line structure, tree, formal parking space etc.) and between vehicles. To avoid large bend radii's it is acceptable that a car and a refuse do not have to pass each other on a junction, providing that adequate forward visibility is provided (demonstrated) to allow drivers to be able see another vehicle prior to committing to the manoeuvre. However, a supermarket delivery box van should be able to pass an estate car on carriageways including bends and junctions. Waste vehicles should be able to stop as close as possible to dwelling storage or collection points, and good practice is that residents should not be required to carry waste more than 30m (excluding any vertical distance) to the storage point, waste collection vehicles should be able to get within 25m of the storage point and collectors should not have to move standard two wheel bins over 15m or four wheeled bins over 10m (distances to be demonstrated). If these distances cannot be achieved consideration should be given to providing bin stores that coincide with these distances.
- 2.3.1 As per 2.1.1 demonstrate vehicular cross over, extending footways on both side to tie in within the existing footways wither side.
- 2.3.2 It should be noted that GCC currently has no technical specification for shared space. This is an adoption matter to which GCC are not obliged to adopt any highway. GCC will only adopt roads that meet our published technical specification. The supporting documentation states that GCH wants the internal highway to be adopted and therefore the layout may need to be amended in light of this. If shared surface is still proposed widths including any changes will need to be annotated along with an unobstructed delineated pedestrian corridor. Any footway leading into the site will also need to be tapered into the shared surface with a transitional feature.
- 2.3.3 As per 2.1.1, 2.3.1 and 2.3.2.

- 2.3.4 the Highway Authority will be recommending conditions to secure the pedestrian improvements between the site and the local facilities.

Transport Statement

The application appears to lack highway details such as:

- Projected trips (based on a surveyed donor site or TRICS analysis)
- Personal Injury Collisions recorded
- Visibility splays for site access
- Visibility splays to ensure no obstructions from parking bays are present.
- Justification for the proposed parking schedule in the absence of the assessment of the DCLG's Residential Car Parking Research Document (RCPR) the Highway Authority has reviewed the 2011Cencus data (QS416EW))which has demonstrated a need for 1.59 spaces per dwelling (totalling 16). Visitor spaces at a ratio of 0.2 dwelling would bring the total to 18
- Proposed PRoW SM39 diversion

<u>Other</u>

How will parking be controlled? As no parking has been provided for the school (pick-up/drop-off) or 'Manglers' (Matson Anglers) whom of both use the area to park historically what measures are proposed to ensure these spaces and internal turning head are only used by residents and associated visitors to site?

In summary if all of the points within the RSA are agreed to and adequately addressed reflected within revised plans and short TS covering highway related matters provided, subject to everything being acceptable the Highway Authority would be in a position to provide more positive comments.

Thanks

Regards

Development Coordinator Highways Development Management Gloucestershire County Council, Shire Hall, Gloucester GL1 2TH

Appendix B



bsed refurbishment to existing

DRAWING MUST BE READ IN CONTINUATION WITH ALL OTHER RELEVANT RRAWINGS. RO NOT COME FROM THIS RRAWING

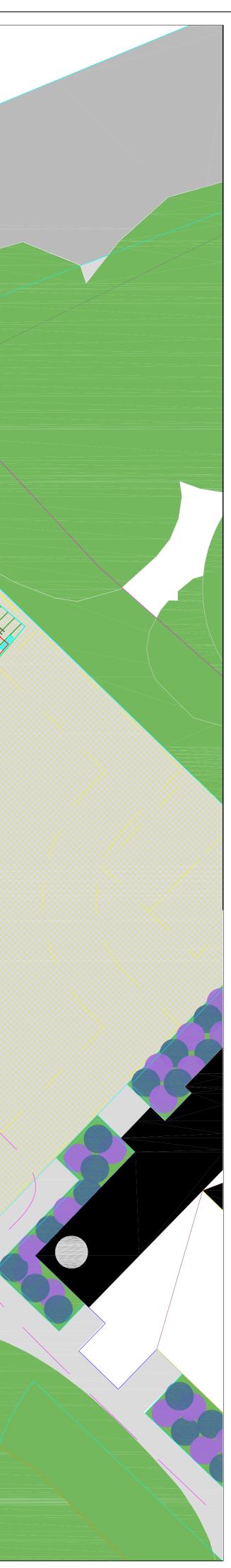
building - 1 no. House



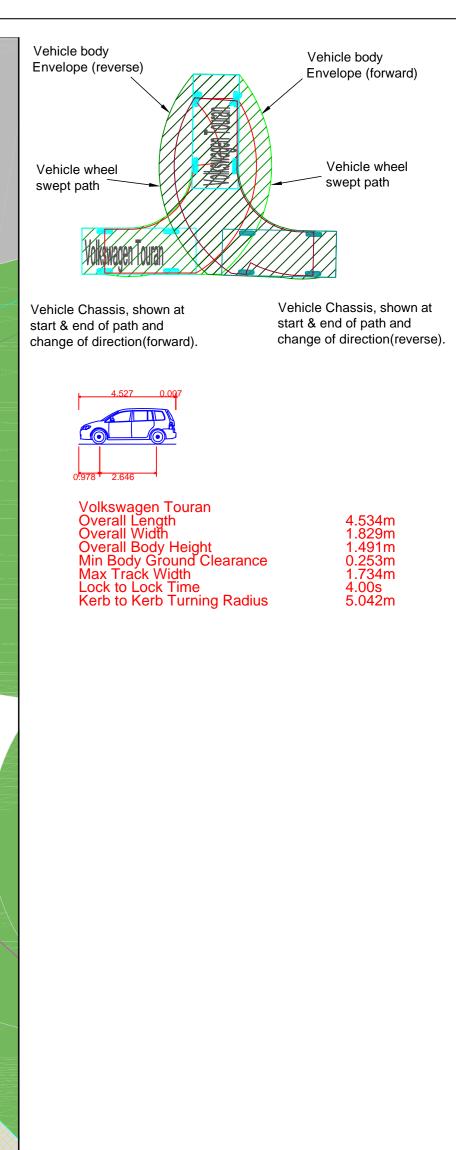
DK

sed refurbishment to existing building - 1 no. House

DK



DK



GENERAL NOTES			
 This drawing to be read in conjunction engineering drawings. 	on with all relevant civil		
LEGEND			
Rev Date Description	Drawn	Chec	
•			
••••			
IIMO			
TRANSPORT			
Drawing Status	Date 27.1	1.202	
PRELIMINARY	Scale 1:10	0@A	
Project	Drawn EC	CC	
School Lodge, Matson	Checked A	BR	
	Project No		
	Drawn Che Date 27.11.20 Scale 1:100@ Drawn ECC Checked ABR		
Title	Client Projec	t No	
Swept parth analysis;			
Volkswagen Touran;	Revision		
manoeuvring on-site			
Drawing No			
19156.OS.106.03			

bsed refurbishment to existing building - 1 no. House

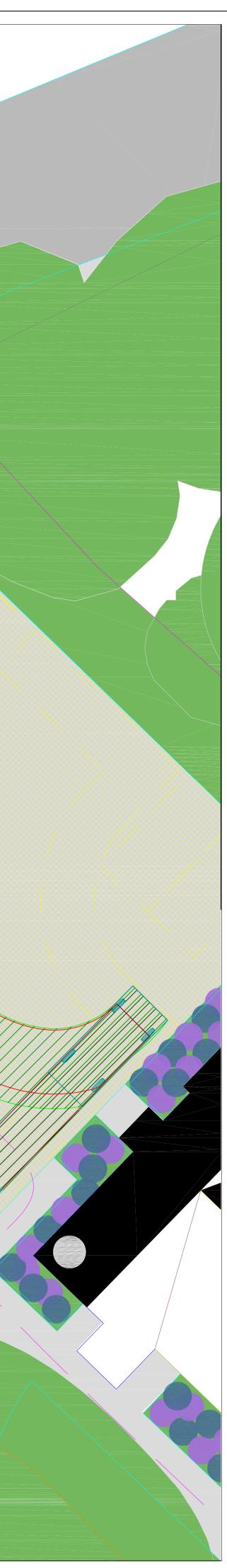
REALMING MUST BE BEAR IN CONTINUED AND ATHER RELEVANT REALMINOS. BO NOT COME FROM THIS REALMING

DK

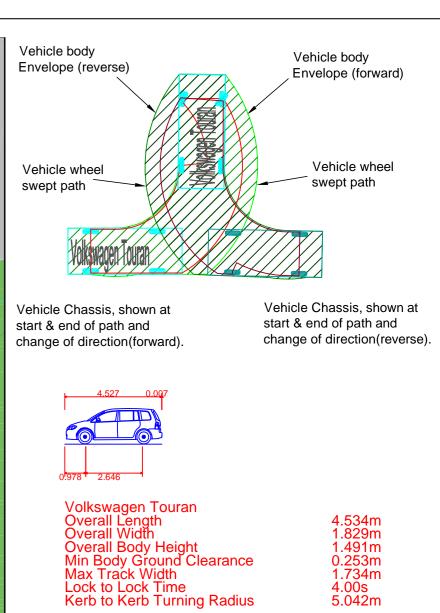
DK

sed refurbishment to existing building - 1 no. House

DK



DK



Overall Body Height Min Body Ground Clearance Max Track Width Lock to Lock Time Kerb to Kerb Turning Radius

GENERAL NOTES	
 This drawing to be read in conjuncti engineering drawings. 	on with all relevant civil
LEGEND	
Rev Date Description	Drawn Check
• . * *	
limo	
TRANSPORT	
Drawing Status	Date 27.11.2020
PRELIMINARY	Scale 1:100@A1
Project	Drawn ECC
School Lodge, Matson	Checked ABR
	Project No
	19156
Title	Client Project No
Swept parth analysis;	
Volkswagen Touran;	Revision
manoeuvring on-site	
Drawing No	
19156.OS.106.04	



DRAWING MUST BE READ IN CONTINUATION WITH ALL OTHER RELEVANT RRAWINGS. DO NOT COME FROM THIS RRAWING

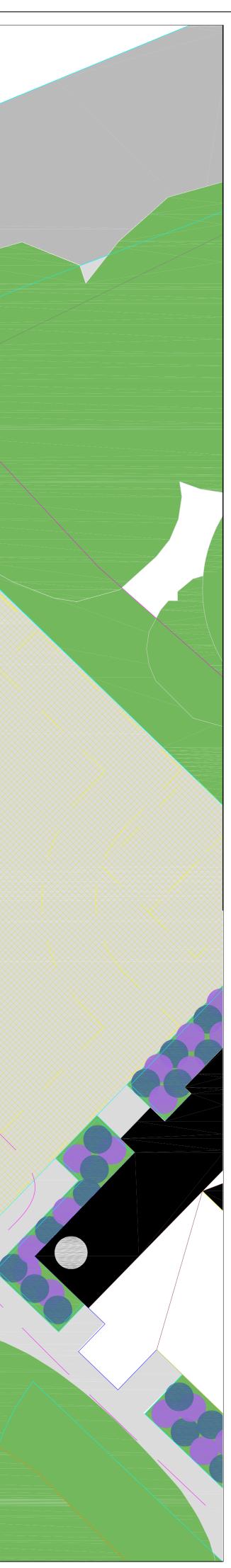
DK

sed refurbishment to existing

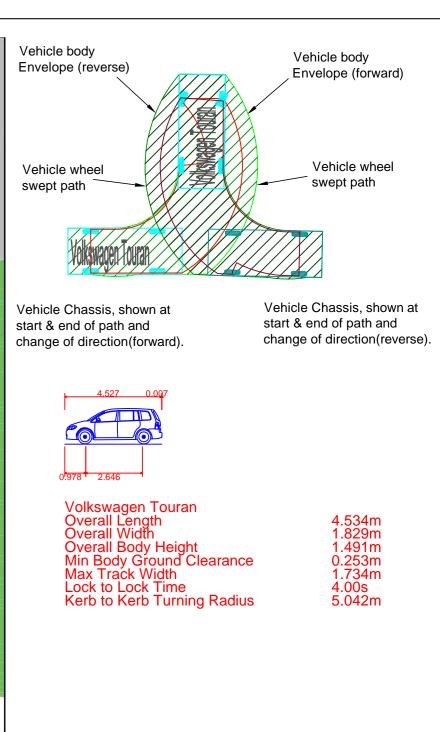
DK

sed refurbishment to existing building - 1 no. House

DK



DK

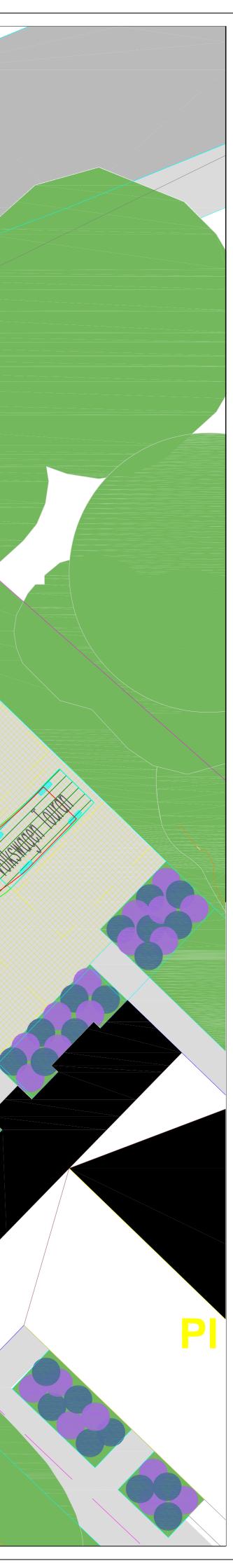


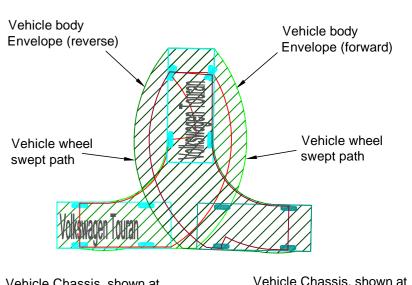
GENERAL NOTES	
 This drawing to be read in c engineering drawings. 	onjunction with all relevant civil
LEGEND	
Rev Date Description	Drawn Check
•	
IIIME	
TRANSPORT	
Drawing Status	Date 27.11.2020
PRELIMINARY	Scale 1:100@A1
Project	Drawn ECC
School Lodge, Matson	Checked ABR
	Project No
	19156
Title	Client Project No
Swept parth analysis;	
Volkswagen Touran;	Revision
manoeuvring on-site	
Drawing No	
19156.OS.106.05	



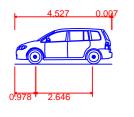
shment to existing 1 no. House DK





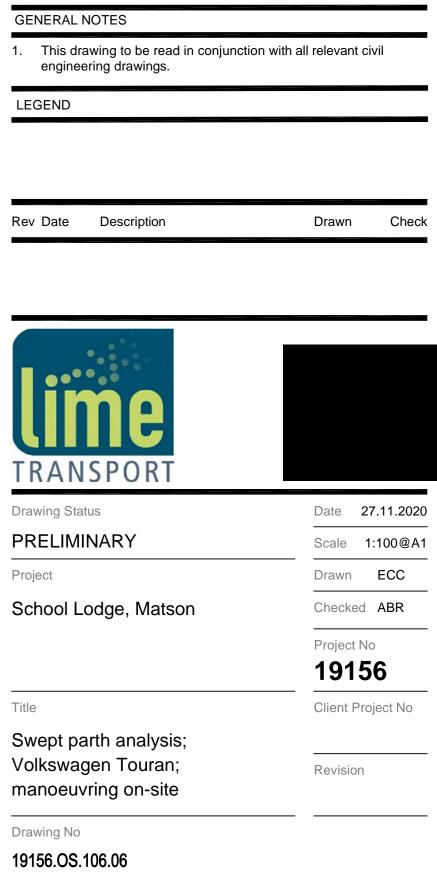


Vehicle Chassis, shown at start & end of path and change of direction(forward). Vehicle Chassis, shown at start & end of path and change of direction(reverse).



Volkswagen Touran Overall Length Overall Width Overall Body Height Min Body Ground Clearance Max Track Width Lock to Lock Time Kerb to Kerb Turning Radius

4 5 2 4 m
4.534m
1.829m
1.491m
0.253m
1.734m
4.00s
5.042m



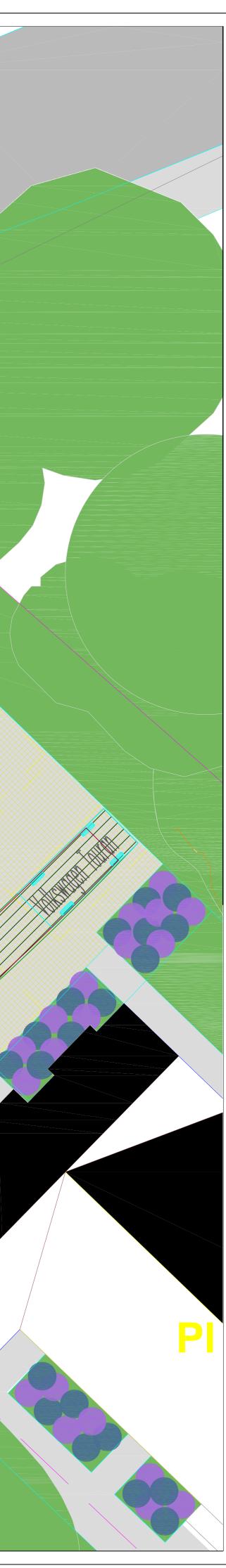


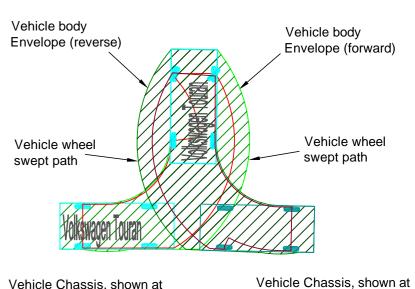
shment to existing

DK



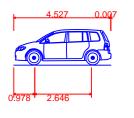






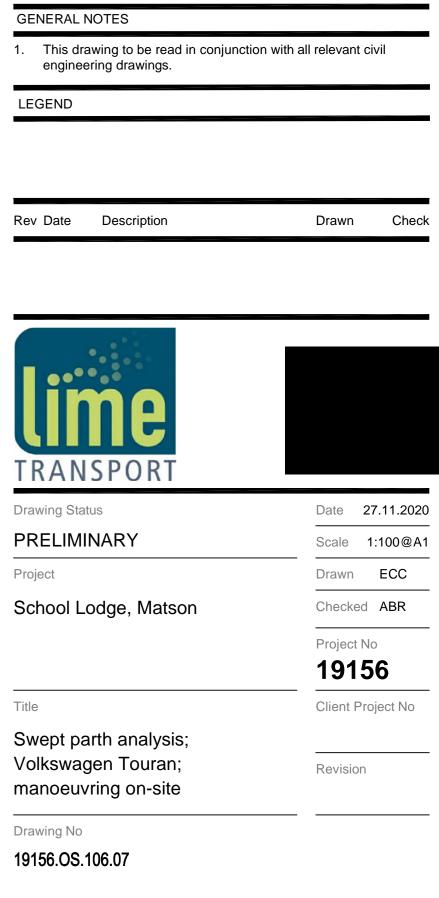
Vehicle Chassis, shown at start & end of path and change of direction(forward).

Vehicle Chassis, shown at start & end of path and change of direction(reverse).



Volkswagen Touran Overall Length Overall Width Overall Body Height Min Body Ground Clearance Max Track Width Lock to Lock Time Kerb to Kerb Turning Radius

4	.534	۱m
1.	.829	9m
1	.491	lm
0	.253	Bm
1	.734	1m
4	.00s	5
5	.042	2m





Appendix C



LOOAHON.		NO.								
SURVEY DATE:	03rd December 2020	DWG 1	TITLE:	ATC Location						
SURVEY TIMES:	24 Hours	JOB T	ITLE:	SS314 Gloucester						

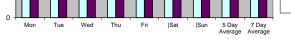
		SS314															
		DECEN		Posted Speed					d Speed (PSL)	-	PSL) + 2 L1)		PSL+15 SL2)				
Site	Location	Lat / Long	Direction	Start Date	End Date	Limit (PSL)	Total Vehicles	5 Day Ave.	7 Day Ave.	>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%		85%ile Speed
	Matson Lane, Gloucester	N51.839607 W2.220058	Eastbound	03 December 2020	09 December 2020		6393	974	913	1332	20.8	230	3.6	12	0.2	26.3	30.9
Site 1			Westbound	03 December 2020	09 December 2020	30	7432	1146	1062	1675	22.5	293	3.9	9	0.1	26.8	31.3
			Two-Way	03 December 2020	09 December 2020	09 December	13825	2120	1975	3007	22	523	4	21	0	27	31

SS314 Gloucester										ite	Site 1		Loc	ation	Matson I	ane, Glo	ucester (N	151.8396	607 W2.2	20058)		
0:	3 December	2020		to	09	9 Decen	nber 202			Dire	ction	Eastbo	und			l Limit	ACPO	(SL1)	DfT	(SL2)		
Time Period	Total Vehicles	0 10	10 15	15 20	20 25	25 30	5pe 30 35	ed Bins 35 40	5 40 45	45 50	50 55	55 60	60 65	65 130	(P 30	SL) 30	35 ACPO	35 ACPO	45 DFT	45 DFT	Mean Speed	85%ile Speed
03 Decen	nber 2020 3	0	0	0	1	0	2	0	0	0	0	0	0	0	2	66.67	0	0	0	0	28	
0100	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	100	1	100	0	0	37.7	
0200 0300	2 2	0	0 1	0	0	0 1	2 0	0 0	0	0 0	0	0	0	0	2 0	100 0	0 0	0 0	0	0 0	33.3 19.3	-
0400 0500	5 10	0	0	1 0	2	2 4	0 4	0	0	0	0	0	0	0	0 4	0 40	0	0	0	0	22.6 28.3	-
0600 0700	31 82	0 0	0 0	0 2	1 13	<mark>19</mark> 44	<mark>8</mark> 21	<mark>2</mark> 2	1 0	0 0	0 0	0 0	0 0	0 0	11 23	35.48 28.05	<mark>3</mark> 2	9.677 2.439	0 0	0 0	30.2 28	34.6 32.1
0800	102	0	2	26	27	36	11	0	0	0	0	0	0	0	23 11	10.78	0	0	0	0	24.2	29.4
0900	58 42	0	0	2	10 8	30 21	14 7	2	0	0	0	0	0	0	16 8	27.59 19.05	2	3.448 2.381	0	0	27.9 26.3	31.1 31.3
1100 1200	37 69	0	1 1	2 10	19 31	11 20	3 6	1	0	0	0	0	0	0	4 7	10.81 10.14	1 1	2.703 1.449	0	0	24.4 24.7	27.6 29.1
1300	54	0	3	8	13	18	10	1	1	0	0	0	0	0	12	22.22	2	3.704	0	0	25.6	31.3
1400 1500	54 73	0	1 6	10 10	15 22	23 15	4 16	1	0	0	0	0	0	0	5 20	9.259 27.4	1 4	1.852 5.479	0 1	0 1.37	24.8 25	29.5 31.4
1600 1700	72 72	0 0	1 0	10 5	16 27	22 29	21 8	2	0 0	0 0	0 0	0 0	0 0	0	23 11	31.94 15.28	2 3	2.778 4.167	0	0 0	26.2 26	31.8 30.1
1800	44	0	0	1	9	22	6	5	0	1	0	0	0	0	12	27.27	6	13.64	1	2.273	28.6	34.1
1900 2000	35 51	0	0	1	11 20	17 22	4	2	0	0	0	0	0	0	6 4	17.14 7.843	2	5.714 1.961	0	0	27 25.2	31 28.8
2100 2200	22 13	0	0	0	4	9 7	6 4	3 0	0	0	0	0	0	0	9 4	40.91	3	13.64 0	0	0	29.1 28.2	35 33.2
2300	6	0	0	0	2	2	1	1	0	0	0	0	0	0	2	33.33	1	16.67	0	0	27.8	-
07-19 06-22	759 898	0	17 17	89 95	210 246	291 358	127 148	21 29	2	2	0	0	0	0	152 182	20.03 20.27	25 34	3.294 3.786	2	0.264	25.9 26.1	30.6 30.8
06-00 00-00	917 940	0	17 18	96 97	249 254	367 374	153 161	30 31	3 3	2 2	0	0	0	0	188 197	20.5 20.96	35 36	3.817 3.83	2 2	0.218 0.213	26.2 26.2	30.9 30.9
04 Decen	nber 2020																					30.9
0000	3 1	0	0	0	2	1 0	0	0	0	0	0	0	0	0	0	0 100	0	0	0	0	23.4 30.6	-
0200 0300	1 2	<mark>0</mark> 0	0 0	0 0	0 0	0 2	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0	1 0	100 0	0 0	0 0	0 0	0 0	31.8 29.7	-
0400	4	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.4	-
0500	8 37	0	0	0	1	5 19	1 10	0	0	0	1	0	0	0	2 10	25 27.03	1	12.5 0	1	12.5 0	30.7 27.5	- 32
0700	79	0	0	3	23	34	17	1	0	1	0	0	0	0	19	24.05	2	2.532	1	1.266	27.3	31
0800 0900	87 66	0 0	4 0	20 5	24 22	30 23	8 13	1 3	0 0	0	0 0	0 0	0	0	9 16	10.34 24.24	1 3	1.149 4.545	0	0	23.6 26.4	29 31.6
<u>1000</u> 1100	42 58	0	1 3	2	5 11	27 27	7 9	0	0	0 2	0	0	0	0	7 13	16.67 22.41	0 4	0 6.897	0	0 5.172	26.9 27.6	30.3 31.7
1200	67	0	1	4	27	22	10	3	0	0	0	0	0	0	13	19.4	3	4.478	0	0	26.3	31.5
1300 1400	68 86	0	0	3 9	16 31	35 25	11 17	3	0	0	0	0	0	0	14 20	20.59 23.26	3	4.412 3.488	0	0	27.1 25.8	32.4 30.6
1500 1600	117 75	1 0	2 0	20 2	38 24	42 31	13 17	1 1	0	0	0	0	0	0	14 18	11.97 24	1	0.855	0	0	24.5 26.8	29.8 31.1
1700	63	0	1	3	14	29	12	4	0	0	0	0	0	0	16	25.4	4	6.349	0	0	26.8	31.2
<u>1800</u> 1900	61 42	0	0	3 1	15 9	23 19	16 10	3	1 0	0	0	0	0	0	20 13	32.79 30.95	4 3	6.557 7.143	0	0	27.8 28.3	31.9 32
2000 2100	33 19	0 0	1 0	1 1	12 3	<mark>8</mark> 10	<mark>9</mark> 3	<mark>2</mark> 2	0 0	0 0	0 0	0 0	0 0	0	11 5	33.33 26.32	2 2	6.061 10.53	0 0	0	26.9 27.9	31.3 34.1
2100	13	0	0	0	2	9	2	0	0	0	0	0	0	0	2	15.38	0	0	0	0	27.2	30
2300 07-19	14 869	0	0 13	1 78	1 250	6 348	4 150	2 24	0	0 3	0	0	0	0	6 179	42.86 20.6	2 29	14.29 3.337	0 4	0 0.46	28.5 26.2	35.3 31
06-22	1000	1	14	83	280	404	182	31	1	3	0	0	0	1	218	21.8	36	3.6	4	0.4	26.4	31
06-00 00-00	1027 1046	1	14 14	84 85	283 286	419 430	188 191	33 33	1 1	3 3	0 1	0	0	1	226 230	22.01 21.99	38 39	3.7 3.728	4 5	0.389 0.478	26.4 26.5	31 31
05 Decen 0000	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1	3	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.8	28.9
0100	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.6	-
0200 0300	2 0	0 0	0 0	0	1 0	1 0	0	0 0	0 0	0	0 0	0	0	0	0	0 0	0 0	0	0 0	0	25.8 -	-
0400 0500	5 4	0	0	1 0	2	2 0	0	0	0	0	0	0	0	0	0	0 25	0	0	0	0	23.9 25.4	-
0600	12	0	0	0	1	8	3	0	0	0	0	0	0	0	3	25	0	0	0	0	28.7	31.3
0700 0800	33 31	0	0	0	4	21 19	7	1	0	0	0	0	0	0	8	24.24 19.35	1	3.03 6.452	0	0	28.2 28.4	30.1 31.9
0900	49 51	0	0	2	14 15	22 26	9 4	2	0	0	0	0	0	0	11 6	22.45 11.76	2	4.082 3.922	0	0	26.7 25.9	32 29.7
1100	71	0	0	10	21	30	8	1	1	0	0	0	0	0	10	14.08	2	2.817	0	0	25.2	29.8
1200 1300	70 60	0	0 1	6 2	19 26	36 15	6 12	3 3	0	0	0	0	0	0	9 15	12.86 25	3	4.286 5	0	0	26.4 26	29.8 32.1
1400 1500	63	0	0	3	22	30 29	6 14	2 1	0	0	0	0	0	0	8 15	12.7	2 1	3.175	0	0	26.2 27	29.4 30.6
1600	61 48	0	0	1	14 14	22	10	1	0	0	0	0	0	0	11	24.59 22.92	1	1.639 2.083	0	0	26.9	30.9
1700 1800	57 54	0	1	2	28 10	19 28	6 11	1	0	0	0	0	0	0	7 13	12.28 24.07	1	1.754 3.704	0	0	24.9 27.3	29.3 31.2
1900	40	0	0	3	10	15	10	1	1	0	0	0	0	0	12	30	2	5	0	0	27.2	31.4
2000 2100	38 23	0 0	0 1	<mark>2</mark> 1	<mark>12</mark> 5	<mark>16</mark> 12	8 4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	<mark>8</mark> 4	21.05 17.39	0 0	0	0 0	0	26.4 26.4	31.4 32.1
2200 2300	24 9	<mark>0</mark> 0	<mark>0</mark> 1	2 1	<mark>4</mark> 6	14 1	4 0	0 0	<mark>0</mark> 0	0 0	<mark>0</mark> 0	0 0	0 0	0	4 0	16.67 0	0	0	0	0	26.9 22.2	30.6
07-19	648	1	5	34	192	297	97	20	2	0	0	0	0	0	119	18.36	22	3.395	0	0	26.4	30.4
06-22 06-00	761 794	1	6 7	40 43	220 230	348 363	122 126	21 21	3 3	0	0	0	0	0	146 150	19.19 18.89	24 24	3.154 3.023	0	0	26.5 26.5	30.8 30.6
00-00	819	2	12	45	238	371	127	21	3	0	0	0	0	0	151	18.44	24	2.93	0	0	26.3	30.5

	SS314 Glo		r								te	Site 1		Loc	ation	Matson L	ane, Glo	ucester (N	151.8396	507 W2.2	20058)	
03	3 December	2020		to	0'	9 Decen	ber 202	20		Dire	ction	Eastbo	und			d Limit	ACPO	(SL1)	DfT	(SL2)		
Time	Total	0	10	15	20	25	30	ed Bins 35	40	45	50	55	60	65	(P 30	SL) 30	35	35	45	45	Mean	85%ile
Period 06 Decem	Vehicles	10	15	20	25	30	35	40	45	50	55	60	65	130			ACPO	ACPO	DFT	DFT	Speed	Speed
0000	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
0100 0200	3 0	0	0	0	2 0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7	-
0300	2	0	0	0	0	1	1	0	0	0	0	0	0	0	1	50 0	0	0	0	0	29 24.4	
0500	3	0	0	0	0	2	1	0	0	0	0	0	0	0	1	33.33	0	0	0	0	29.9	-
0600 0700	8 18	0	0	0 2	0 5	3 10	5 1	0	0	0	0	0	0	0	5 1	62.5 5.556	0	0	0	0	30.1 25.2	- 28.4
0800	23	0	1	1	11	8	1	0	1	0	0	0	0	0	2	8.696	1	4.348	0	0	24.8	29.1
0900 1000	41 50	0	0	0	6 15	21 20	12 11	2	0	0	0	0	0	0	14 12	34.15 24	2	4.878 2	0	0	28.3 26.6	32.4 32.2
1100 1200	77 77	0	1 0	0 5	27 20	42 36	6 11	1 5	0	0	0	0	0	0	7 16	9.091 20.78	1 5	1.299 6.494	0	0	26.5 27.1	29.7 30.9
1300	81	0	1	3	23	33	18	3	0	0	0	0	0	0	21	25.93	3	3.704	0	0	26.8	31.4
1400 1500	57 49	0	1 0	9 2	10 12	20 29	15 6	2	0	0	0	0	0	0	17 6	29.82 12.24	2	3.509 0	0	0	26.5 26.3	31.2 29.7
1600	55	0	0	3	23	21	6	2	0	0	0	0	0	0	8	14.55	2	3.636	0	0	26.1	29.7
1700 1800	31 28	0	0	3	7	15 3	3	2	0	1	0	0	0	0	6 7	19.35 25	3	9.677 0	1	3.226 0	27.1 25.1	30.7 30.8
1900	25	0	0	0 4	12	5	7 7	1 1	0	0	0	0	0	0	8	32	1	4	0	0	27.1	31.9
2000 2100	44 12	2 0	0	4	17 4	13 6	2	0	0	0	0	0	0	0	8 2	18.18 16.67	0	2.273 0	0	0	24.6 27.1	30.5 33.6
2200 2300	7	<mark>0</mark> 0	<mark>0</mark> 0	0 0	<mark>4</mark> 0	2 2	1 0	0	0 0	0	0 0	0 0	0 0	0	1 0	14.29 0	0	0	0	0 0	25.6 26.9	•
07-19	587	0	5	35	172	258	97	18	1	1	0	0	0	0	117	19.93	20	3.407	1	0.17	26.6	30.7
06-22 06-00	676 685	2	5 5	39 39	205 209	285 289	118 119	20 20	1	1	0	0	0	0	140 141	20.71 20.58	22 22	3.254 3.212	1	0.148 0.146	26.5 26.5	30.8 30.8
00-00	702	2	5	40	216	296	121	20	1	1	0	0	0	0	143	20.37	22	3.134	1	0.142	26.5	30.8
07 Decem	1ber 2020 2	0	0	0	0	0	1	1	0	0	0	0	0	0	2	100	1	50	0	0	36.3	-
0100	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.9	•
0200 0300	2 1	0	0	0	0 1	2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.2 22.6	-
0400 0500	3 14	0 0	0 0	0 0	3 1	0 6	0 4	0 2	<mark>0</mark> 1	0	0	0	0	0	0 7	0 50	0 3	0 21.43	0 0	0 0	23 31.2	- 36.9
0600	28	0	0	0	4	16	6	2	0	0	0	0	0	0	8	28.57	2	7.143	0	0	29.2	33.8
0700 0800	72 93	0	0	1	9 24	40 34	21 11	1	0	0	0	0	0	0	22 12	30.56 12.9	1	1.389	0	0	28.4 24.2	31.8 29.9
0900	57	0	0	2	8	30	16	1	0	0	0	0	0	0	17	29.82	1	1.754	0	0	27.8	30.8
1000 1100	62 58	0	2	5 16	16 10	28 17	8 12	3 1	0	0 1	0	0	0	0	11 14	17.74 24.14	3 2	4.839 3.448	0	0	25.9 25.3	30.7 33.5
1200	61	0	0	5	8	31	13	3	1	0	0	0	0	0	17	27.87	4	6.557	0	0	27.9	32.1
1300 1400	72 49	0	0	8	28 17	28 14	8 13	0	0	0	0	0	0	0	8 14	11.11 28.57	0	0 2.041	0	0	25 26.6	29.6 31.2
1500	85	0	1	24	25	26	6	3	0	0	0	0	0	0	9	10.59	3	3.529	0	0	23.7	29.4
1600 1700	55 51	0	0	2	6 16	25 25	19 6	1	2 0	0	0	0	0	0	22 7	40 13.73	3 1	5.455 1.961	0	0	28.8 26.1	32.7 29.8
1800	43	0	0	2 1	11	22	5	3	0 0	0	0 0	0	0	0	8 7	18.6	3	6.977	0	0 0	26.8	31.9
1900 2000	32 46	0	0	6	18 15	6 18	7 6	0	0	0	0	0	0	0	6	21.88 13.04	0	0	0	0	25.3 24.7	31 29.8
2100 2200	18 17	0	0	1	7	10 6	0	0	0	0	0	0	0	0	0	0 11.76	0	0 5.882	0	0	24.6 25.4	28 30.1
2300	6	0	0	0	2	3	1	0	0	0	0	0	0	0	1	16.67	0	0	0	0	27	-
07-19 06-22	758 882	0	4 5	95 103	178 222	320 370	138 157	19 21	3	1	0	0	0	0	161 182	21.24 20.63	23 25	3.034 2.834	<u>1</u> 1	0.132	26.2 26.2	31.2 31
06-00	905	0	5	104	232	379	159	22	3	1	0	0	0	0	185	20.44	26	2.873	1	0.11	26.1	31
00-00 08 Decem	929 1ber 2020	0	6	104	238	387	164	25	4	1	0	0	0	0	194	20.88	30	3.229	1	0.108	26.2	31.2
0000	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.3 26.7	-
0100 0200	2	0	0	0 1	0	2 0	0	0 1	0	0	0	0	0	0	0	0 50	0	0 50	0	0	26.7 29.5	-
0300	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1 2	100 66.67	0	0	0	0	34 27.9	-
0500	13	0	0	0	3	4	1	4	0	1	0	0	0	0	6	46.15	5	38.46	1	7.692	31.4	37.6
<u>0600</u> 0700	25 71	0	0	2	1 8	12 30	7 25	3 6	0 1	0	0	0	0	0	10 32	40 45.07	3 7	12 9.859	0	0	29.1 29.2	34.8 32.2
0800	98	0	2	23	38	27	7	1	0	0	0	0	0	0	8	8.163	1	1.02	0	0	23.3	28.1
0900	48 39	0	0	3	4	27 21	11 10	3	0	0	0	0	0	0	14 10	29.17 25.64	3	6.25 0	0	0	28.1 27.7	31.6 31.2
1100	54	1	0	10	6	25	10	2	0	0	0	0	0	0	12	22.22	2	3.704	0	0	26	31.5
1200 1300	64 62	1 0	1 0	6 3	32 20	17 25	6 11	1	0	0	0	0	0	0	7 14	10.94 22.58	1	1.563 4.839	0	0	24.1 27.1	28.8 30.4
1400	71	0	0	4	20	33	12	2	0	0	0	0	0	0	14	19.72	2	2.817	0	0	26.7	30.9
1500 1600	94 69	0	1 0	26 1	37 12	22 32	7 22	1	0	0	0	0	0	0	8 24	8.511 34.78	1	1.064 2.899	0	0	23.1 28.2	28.2 33.3
1700 1800	59 44	0	2 0	2 1	9 11	32 11	13 16	1 5	0	0	0	0	0	0	14 21	23.73	1 5	1.695 11.36	0	0	27 29	31.3 34.7
1800	44 66	0	0	7	33	11 16	16 9	5 1	0	0	0	0	0	0	21 10	47.73 15.15	5 1	11.36	0	0	29 24.7	34.7 30.5
2000 2100	32 18	<mark>0</mark> 0	<mark>0</mark> 0	2 2	17 2	<mark>8</mark> 10	2 3	<mark>0</mark> 1	2 0	1 0	0 0	0 0	0	0	5 4	15.63 22.22	<mark>3</mark> 1	9.375 5.556	1 0	3.125 0	26.2 27.9	30.8 33.5
2200	20	0	1	0	6	9	4	0	0	0	0	0	0	0	4	20	0	0	0	0	25.6	30.8
2300 07-19	3 773	0	0 6	0 80	0 205	3 302	0 150	0 26	0	0	0	0	0	0	0 178	0 23.03	0 28	0 3.622	0	0	27.5 26.3	31.2
06-22	914	2	6	93	258	348	171	31	4	1	0	0	0	0	207	22.65	36	3.939	1	0.109	26.3	31.2
06-00 00-00	937 959	2	7	93 94	264 268	360 367	175 179	31 36	4	1	0	0	0	0	211 221	22.52 23.04	36 42	3.842 4.38	1 2	0.107	26.2 26.3	31.1 31.2
••			-							_		-	-	-								

	SS314 Glo	uceste	r							Si	te	Site 1		Loc	ation	Matson L	ane, Glou	ucester (N	151.8396	507 W2.2	20058)	
0	3 December	2020		to	09	9 Decen	ber 202	20		Dire	ction	Eastbo	und		•	l Limit	ACPO	(SL1)	DfT	(SL2)		
Time	Total	0	10	15	20	25	Spee 30	ed Bins 35	; 40	45	50	55	60	65	(P 30	SL) 30	35	35	45	45	Mean	85%ile
Period	Vehicles	10	15	20	25	30	35	40	45	50	55	60	65	130			ACPO	ACPO	DFT	DFT	Speed	Speed
09 Decen 0000	nber 2020 6	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.5	-
0100	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	100	0	0	0	0	33.4	-
0200 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	4 14	0 0	0	0	2	1 4	1	0	0	0	0	0	0	0	1	25	0 1	0	0	0	26.8	-
0500 0600	33	0	0	1	4	4	5 15	2	1	0	0	0	0	0	6 17	42.86 51.52	2	7.143 6.061	0	0	29 29.7	32.9 33.7
0700 0800	69 88	0	0	2 12	10 44	41 19	9 11	6 0	0	1	0	0	0	0	16 11	23.19 12.5	7	10.14 0	1	1.449 0	28.6 23.9	31.7 29.4
0900	67	0	1	0	13	40	10	3	0	0	0	0	0	0	13	12.5	3	4.478	0	0	27.1	30.6
<u>1000</u> 1100	48 60	0	0	2 7	7 15	29 27	7 9	3 1	0	0	0	0	0	0	10 10	20.83 16.67	3 1	6.25 1.667	0	0	27.5 26.4	31.1 30.5
1200	74	0	0	7	24	39	4	0	0	0	0	0	0	0	4	5.405	0	0	0	0	25.2	28.7
1300 1400	71 69	1	0	4	20 32	28 16	15 8	3	0	0	0	0	0	0	18 11	25.35 15.94	3	4.225 4.348	0	0	26.9 25	32.4 30.4
1 500	91	0	2	19	39	14	15	1	1	0	0	0	0	0	17	18.68	2	2.198	0	0	23.8	30.4
1600 1700	70 44	0	1	9 0	21 10	21 22	9 12	7 0	2 0	0	0	0	0	0	18 12	25.71 27.27	9 0	12.86 0	0	0	26.5 27.8	33.4 31.4
1800	38	0	0	1	14	18	5	0	0	0	0	0	0	0	5	13.16	0	0	0	0	25.9	29.6
1900 2000	54 31	0	1	4	10 5	25 17	12 4	2	0	0	0	0	0	0	14 5	25.93 16.13	2	3.704 3.226	0	0	27 25.7	31 30.6
2100	32	0	0	3	16	8	5	0	0	0	0	0	0	0	5	15.63	0	0	0	0	25.1	30
2200 2300	27 7	0	2	3 0	11 1	10 5	1	0	0	0	0	0	0	0	1 1	3.704 14.29	0	0	0	0	23.5 27.4	28.7
07-19	789	1	10	70	249	314	114	26	4	1	0	0	0	0	145	18.38	31	3.929	1	0.127	26	30.6
06-22 06-00	939 973	2	11 13	81 84	281 293	378 393	150 152	31 31	4	1	0	0	0	0	186 188	19.81 19.32	36 36	3.834 3.7	1	0.106 0.103	26.2 26.1	30.8 30.6
00-00	998	2	13	85	301	401	159	31	5	1	0	0	0	0	196	19.64	37	3.707	1	0.1	26.1	30.8
Average 0000	Day 4	0	0	0	1	1	0	0	0	0	0	0	0	0	1	13.33	0	3.333	0	0	24	-
0100	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25 44.44	0	8.333	0	0	23.6 29.3	-
0200	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	25	0	<u>11.11</u> 0	0	0	29.5	-
0400 0500	<mark>4</mark> 9	0	0	0 0	<mark>2</mark> 2	2 4	0 2	0 1	0	0	0	0	<mark>0</mark> 0	0	0 4	10 40.91	0 1	0 15.15	0 0	0 3.03	24.6 29.9	-
0600	25	0	0	1	2	13	2	1	0	0	0	0	0	0	9	36.78	1	5.747	0	0	29.9	32.9
0700 0800	61 75	0	0	2	10 25	31 25	14 8	2	0	0	0	0	0	0	17 8	28.54	3	4.717	0	0.472	28.1 24.2	31.5 29.3
0900	55	0	0	15 2	25 11	25	12	2	0	0	0	0	0	0	0 14	26.17	2	4.145	0	0	27.4	31.3
<u>1000</u> 1100	48 59	0	1	2 7	11 16	25 26	<mark>8</mark> 8	1	0	0	0	0	0	0	9 10	19.16 16.87	1	2.994 3.133	0 1	0.964	26.6 26	30.8 30.4
1200	69	0	0	6	23	29	8	2	0	0	0	0	0	0	10	15.15	2	3.527	0	0.904	25.9	30.4
1300 1400	67 64	0	1	4	21 21	26 23	12 11	2	0	0	0	0	0	0	15 13	21.79 19.82	2	3.632 3.118	0	0	26.4 26	31.1 30.6
1500	81	0	2	15	27	25	11	1	0	0	0	0	0	0	13	15.61	2	2.105	0	0.175	24.5	30
1600 1700	63 54	0	0	4	17 16	25 24	15 9	2	1	0	0	0	0	0	18 10	27.93 19.36	3 2	4.505 3.448	0	0.265	27 26.4	32 30.5
1800	45	0	0	2	12	18	9	3	0	0	0	0	0	0	12	27.56	3	6.41	0	0.321	27.4	32.1
1900 2000	42 39	0	0	2	15 14	15 15	8	1	0	0	0	0	0	0	10 7	23.81 17.09	2	3.741 2.909	0	0.364	26.5 25.6	31.3 30.1
2100	21	0	0	1	6	9	3	1	0	0	0	0	0	0	4	20.14	1	4.167	0	0	26.7	31.8
2200 2300	17 7	0	0	1	5 2	8	2	0	0	0	0	0	0	0	3 1	14.88 21.28	0	0.826 6.383	0	0	25.8 26.7	30.1
07-19	740	1	9	69	208	304	125	22	2	1	0	0	0	0	150	20.28	25	3.434	1	0.174	26.2	30.8
06-22 06-00	867 891	<u>1</u> 1	9 10	76 78	245 251	356 367	150 153	26 27	3	<u>1</u> 1	0	0	0	0	180 184	20.77 20.66	30 31	3.509 3.479	1	0.165 0.16	26.3 26.3	30.9 30.9
00-00 Virtual W	913	1	11	79	257	375	157	28	3	1	0	0	0	0	190	20.84	33	3.598	2	0.188	26.3	30.9
Mon	929	0	6	104	238	387	164	25	4	1	0	0	0	0	194	20.88	30	3.229	1	0.108	26.2	31.2
Tue Wed	959 998	2	7 13	94 85	268 301	367 401	179 159	36 31	4	2	0	0	0	0	221 196	23.04 19.64	42 37	4.38 3.707	2	0.209	26.3 26.1	31.2 30.8
Thu	940	0	18	97	254	374	161	31	3	2	0	0	0	0	197	20.96	36	3.83	2	0.213	26.2	30.9
Fri Sat	1046 819	1 2	14 12	85 45	286 238	430 371	191 127	33 21	1 3	3 0	1	0	0	1 0	230 151	21.99 18.44	39 24	3.728 2.93	5 0	0.478 0	26.5 26.3	31 30.5
Sun	702	2	5	40	216	296	127	20	1	1	0	0	0	0	143	20.37	24	3.134	1	0.142	26.5	30.8
5 Day Av	erage 974	1	12	93	269	392	171	31	3	2	0	0	0	0	208	21.3	37	3.8	2	0.2	26.3	31.0
7 Day Av	erage																					
[] Total Veh	913 nicles	1	11	79	257	375	157	28	3	1	0	0	0	0	190	20.8	33	3.6	2	0.2	26.3	30.9
[]	6393	9	75	550	1801	2626	1102	197	21	10	1	0	0	1	1332	21	230	4	12	0	26	31
100 -												40										
90 -										1 <u></u>			31.2	31.2	30.8	30.9	31	30.5	30.8	31.0 3	30.9	
80 - 70 -										3		30 2	_	26.3	26.	26.2		26.3 26.	-			
60 -												ſ			Ē				i r	ΤĒ		Mean
% 50 -										-		듙20 -			-							
40 -										- 3	15	-										
30 -	20.88 23.0	4 19	9.64 2	20.96 2	1.99	8.44	20.37	21.3	20.8			10										85%ile
20 -	3770	.38	3707	1.83	3728	1.02	3 124			•4	5											
0.	0.108	0,209	0.1	0.213	0.478	2 .93 0	³ 134 0.142	^{6.8} 0.2	^{8.6} 0.2			₀ ∐				, L.I.,						

10 3229 430 3707 0.1 323 3728 293 3134 5.8 0.2 5.0 2 0.2 0 0



brand <th< th=""><th></th><th>SS314 Glou</th><th>uceste</th><th>r</th><th></th><th></th><th></th><th></th><th></th><th></th><th>Si</th><th>ite</th><th>Site 1</th><th></th><th>Loc</th><th>ation</th><th>Matson I</th><th>.ane, Glo</th><th>ucester (N</th><th>151.839</th><th>607 W2.2</th><th>220058)</th><th></th></th<>		SS314 Glou	uceste	r							Si	ite	Site 1		Loc	ation	Matson I	.ane, Glo	ucester (N	151.839	607 W2.2	220058)	
Inter Note No No No No		0/1/00			to	0	9 Decen				Dire	ction	Westb	ound		-		ACPO	(SL1)	DfT	(SL2)		
Shartery 1989 Unit of a legal and a le								30	35														
1710 0	Saturday,																05			e 1	a . 1		
SNC 2 0	0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Into Into <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																							
bits 11 0 0 1 0 0 0 0	-																						
1980 197 3 3 3 3 14 1 1 0 0 0 0 1 1 1 0 0 2 0 0 0 1 </td <td>-</td> <td></td>	-																						
OPEC Set O C O O O IS List C Sign Sign <t< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	-																						
1100 67 0 1 2 1 1 2 1 1 2 1 1 2 0 <td>0900</td> <td>56</td> <td>0</td> <td>2</td> <td>4</td> <td>11</td> <td>21</td> <td>16</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>18</td> <td>32.14</td> <td>2</td> <td>3.571</td> <td>0</td> <td>0</td> <td>27.2</td> <td>32.2</td>	0900	56	0	2	4	11	21	16	2	0	0	0	0	0	0	18	32.14	2	3.571	0	0	27.2	32.2
1500 64 0 0 0 1 15 2.6 2.326 0 0 0 15 2.6 17.10 0 0 0 0 0 0 0 0 0 0 0 1 17.10 0 0 0 0 1 17.10 0 0 0 0 1 17.10 0 </td <td>-</td> <td></td>	-																						
1+40 64 0 0 0 0 0 0 1 16.7 2 3.0 0 3.2 0 0 0 0 1 1 1.0 0 0 0 0 0 1 1 1.1 1.0 0	-		-												-								
1960 196 0 1 5 32 43 1 0 0 0 0 2 23.5 6 5.5 0 0 27.7 312 1100 44 0 1 0 1 1 1 0 0 0 0 0 1 2 1.5 0 <td>-</td> <td></td>	-																						
1700 44 0 1 20 1 20 1 1 0 0 0 0 1 2 5 2 1 1800 44 0 1 0 <																							
1960 41 0 1 1 8 24 5 2 0 0 0 0 0 0 0 17 777 2 4778 0 0 27.1 532 2100 20 0 1 1 1 0 </td <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>43</td> <td></td>	-						43																
3500 42 0 2 1 15 16 8 1 1 0 0 0 0 10 2.81 2 10 20 <																							
2200 17 0 0 3 6 8 0 <td>2000</td> <td>42</td> <td>0</td> <td>2</td> <td>1</td> <td>15</td> <td>14</td> <td>8</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>10</td> <td>23.81</td> <td>2</td> <td>4.762</td> <td>0</td> <td>0</td> <td>26.7</td> <td>32</td>	2000	42	0	2	1	15	14	8	1	1	0	0	0	0	0	10	23.81	2	4.762	0	0	26.7	32
2200 5 0 1 0 2 2 0																							
06-02 1097 4 20 61 226 217 429 33 8 0 0 0 0 223 228.7 41 4.412 0 0 26.8 31.4 0000 1044 4 215 25 27.7 47.9 38 8 0 0 0 233 23.8 44 4.15 0 0 26.8 31.4 0000 2 0 <th< td=""><td>2300</td><td>5</td><td>0</td><td>1</td><td>0</td><td>2</td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>23.4</td><td>-</td></th<>	2300	5	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.4	-
00-00 104 4 22 62 27 437 190 36 8 0 0 0 1 500 1 4 44 44 12 0 0 26.6 31.1 0000 2 0																							
BU December 2829 DODD 2 0 0 1 0																							
OTO 2 0	-		4	22	02	270	437	199	30	0	U	U	U	U	U	243	23.20	44	4.215	U	U	20.0	31.4
0 0																							
0460 3 0	0200	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.8	
0000 14 0 1 9 2 1 0 0 0 3 1 7 7 8 0 <td>-</td> <td></td> <td>-</td>	-																						-
07:00 56 0 1 3 17 27 8 0<	0500	9	0	0	-			1	1			0	0	0	-	2	22.22		11.11	0	0	28.7	
0900 69 0 <td></td>																							
100 61 0 4 13 29 14 1 0 0 0 0 1 1339 0 0 272 218 1 1539 0 0 272 218 1 157 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 0 2 2 2 3 3 1 0	-		-												-								
1200 86 0 1 5 10 7 5 0 0 0 0 0 2 25.8 5 5.81.4 0 0 7.73 32.4 1300 106 1 9 35 43 19 1 0									1														
1300 78 0 2 6 14 33 19 4 0<																							
1900 124 0 4 21 0 0 0 0 0 1 1 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0 1 0 0 0 0 1 1 1 1 0 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td>1300</td> <td>78</td> <td>0</td> <td>2</td> <td>6</td> <td>14</td> <td>33</td> <td>19</td> <td>4</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>23</td> <td>29.49</td> <td>4</td> <td>5.128</td> <td>0</td> <td>0</td> <td>27.3</td> <td>32.1</td>	1300	78	0	2	6	14	33	19	4	0	0	0	0	0	0	23	29.49	4	5.128	0	0	27.3	32.1
1600 86 0 6 29 36 12 3 0 0 0 0 15 17.44 3 3.488 0 0 26.5 30.4 1800 79 0 0 1 20 34 19 4 1 0 0 0 30.33 2 2.062 1 1031 27.7 32.1 1800 79 0 0 1 11 5 9 0 0 0 1 0 2.062 1 0 0 0 2.06 0 0 2.063 0 <td>-</td> <td></td>	-																						
1800 79 0 0 1 20 34 19 4 1 0 0 0 24 30.8 5 6.329 0 0 22.2 21.1 1300 56 0 0 1 11 5 9 0 0 0 9 25 0 0 0 27.5 32.4 200 23 0 1 0 4 1 0 0 0 0 8 38.1 2 9.524 0 0 28.9 33.3 2200 23 0 1 0 4 0 0 0 0 0 3 16.67 0 0 0 2.224 1 0.007 2.224 1 0.007 2.224 1 0.007 2.444 1 0.082 2.6.6 31.1 06-00 1.3 1 0 0 0 0 0 0 0<	1600	86	-		6	29	36	12	3	0	0	0	0	0	0	15	17.44		3.488	0	0	26.5	30.4
2000 36 0 0 1 11 15 9 0 0 0 0 9 25 0 0 0 276 316 2100 23 0 1 0 4 10 7 1 0												1			-								
210 21 0 0 2 11 6 1 1 0 0 0 8 38.1 2 9.524 0 0 28.9 33.3 2200 23 0 1 0 4 10 7 1 0 0 0 0 0 0 0 0 0 0 28.347.8 1 4.348 0 0 28.6 30.3 07-19 1034 0 9 85 27.7 455 185 21 1 0 1 0 0 244 21 22.46 1 0.066 26.5 31 09-00 1203 0 0 88 312 538 22.5 27 2 0 1 0 0 0 255 21.2 30 2.494 1 0.083 26.6 31.1 09-0 0 0 0 0 0 0 0 2.61 1.36.7 0 0.0 2.61 1.36.7 0 0.0 2.22.20<	-														-								
2300 18 0 0 2 1 3 0 <td></td>																							
07.9 1034 0 9 85 277 455 185 21 1 0 1 0 0 0 208 20.12 23 2.224 1 0.097 26.4 308 06-00 1203 0 10 88 317 546 225 27 2 0 1 0 0 0 255 21.2 30 2.494 1 0.083 26.6 311 00-00 1222 0 1 0 0 0 2 25 27.1 30 2.494 1 0.083 26.6 311 00-00 1222 0 1 1 0 0 0 0 0 0 0 0 2.222 0 0 0 2.6.6 311 0000 9 1 3 1 0																							
06-00 1203 0 10 88 312 538 225 27 2 0 1 0 0 0 255 21.2 30 2.494 1 0.083 26.6 31.1 00-00 1222 0 1 0 0 0 2 2 2.6 31.1 0 0.0 2.2 2.0 0 0 0 2.2 0	07-19	1034	0	9	85	277	455	185	21	1	0	1	0	0	0	208	20.12	23	2.224	1	0.097	26.4	30.8
00-00 1222 0 1 0 0 261 21.36 32 2.619 1 0.082 26.6 31.1 05 December 2020 0 <td></td>																							
0000 9 1 3 1 0 2 2 0			0	10	88	317	546	229	29		0	1	0	0	0	261	21.36	32	2.619	1	0.082	26.6	31.1
0200 4 0 0 0 0 0 0 0 1 25 0 <td>0000</td> <td>9</td> <td></td> <td>-</td>	0000	9																					-
0300 3 0 0 1 2 0	-														-			-					
0500 5 0 0 1 3 0 1 0 0 0 0 1 20 1 20 0 0 0 27.7 - 0600 15 0 0 1 20 0	0300	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.4	
0600 15 0 0 1 2 9 3 0 <td></td>																							
0800 28 0 0 3 3 14 7 1 0 10 21.28 3 6.383 0 0 27.5 31.4 1000 62 0 0 1 1 0 0 0 0 0 11 1.77.4 1 1.613 0 27.7 31.7 1000 66 0 1 13 29 19 3 0 1 0 0 0 11 1.613 0 2.8 33.6 1200 73 0 2 3 1.24 2.13 0 0 0 0 26 32.91 4 5.063 0 2.8.2 33 1400 78	0600	15	0	0	1	2	9	3	0	0	0	0	0	0	0	3	20	0	0	0	0	26.8	
1000 62 0 2 15 34 10 1 0 0 0 0 0 11 17.74 1 1.613 0 2.6.8 30.6 1100 66 0 0 1 13 29 19 3 0 1 0 0 0 23 34.85 4 6.061 1 1.515 28.4 32.5 1200 73 0 2 3 12 42 13 0 0 1 0 0 0 14 19.18 1 1.37 1 1.37 27.2 30.5 1400 78 0 2 2 15 48 8 3 0 0 0 0 11 14.1 3 3.846 0 26.7 30 1500 73 0 1 1 13 31 20 3 2 0 0 0 22.5 </td <td></td>																							
1100 66 0 1 13 29 19 3 0 1 0 0 0 0 23 34.85 4 6.061 1 1.515 28.4 32.5 1200 73 0 2 3 12 42 13 0 0 1 0 0 0 14 19.18 1 1.37 1 1.37 27.2 30.5 1300 79 1 1 16 34 22 2 0 0 0 0 26 32.91 4 5.063 0 28.2 33 1400 78 0 2 2 15 48 8 3 0 0 0 0 141 13 3.846 0 0 28.7 33 1400 78 0 1 4 20 28 16 3 1 0 0 0 141 14.13 3.846 0 0 27.7 31.5 1600 71 0 1 <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-														-								
1300 79 1 1 16 34 22 2 0 0 0 0 26 32.91 4 5.063 0 28.2 33 1400 78 0 2 2 15 48 8 3 0 0 0 0 11 14.1 3 3.846 0 0 26.7 30 1500 73 0 1 4 20 28 16 3 1 0 0 0 27.4 4 5.479 0 27.7 31.5 1600 71 0 1 1 13 31 20 3 2 0 0 0 25 35.21 5 7.042 0 28.4 33.6 1700 69 0 2 12 33 17 3 0 0 0 20 29.85 3 4.478 0 28.32.2 190	1100	66	0	0	1	13	29	19	3	0	1	0	0	0	0	23	34.85	4	6.061	1	1.515	28.4	32.5
1400 78 0 2 2 15 48 8 3 0 0 0 0 0 11 14.1 3 3.846 0 0 26.7 30 1500 73 0 1 4 20 28 16 3 1 0 0 0 0 20 27.4 4 5.479 0 0 27 31.5 1600 71 0 1 1 13 31 20 3 2 0 0 0 0 25 35.21 5 7.042 0 0 28.4 33.6 1700 69 0 2 13 37 15 2 0 0 0 0 17 24.64 2 28.99 0 27.6 31.7 1800 67 0 2 12 33 17 3 0 0 0 0 29.85 3 4.478 0 28.32.2 1900 43 1 0 1			-												-								
1600 71 0 1 13 31 20 3 2 0 0 0 0 25 35.21 5 7.042 0 28.4 33.6 1700 69 0 0 2 13 37 15 2 0 0 0 0 17 24.64 2 2.899 0 0 27.6 31.7 1800 67 0 0 2 12 33 17 3 0 0 0 0 20 29.85 3 4.478 0 0 28.8 32.2 1900 43 1 0 2 14 20 4 2 0 0 0 0 6 13.95 2 4.651 0 28.8 30 2000 34 0 0 1 12 1 0 0 0 0 0 0 0 29.41 32.8 2100 20 0 0 0 0 0 0 0 0	1400	78	0	2	2	15	48	8	3	0	0	0	0	0	0	11	14.1	3	3.846	0	0	26.7	30
1700 69 0 0 2 13 37 15 2 0 0 0 0 17 24.64 2 2.899 0 0 27.6 31.7 1800 67 0 0 2 12 33 17 3 0 0 0 0 20 29.85 3 4.478 0 0 28 32.2 1900 43 1 0 2 14 20 4 2 0 0 0 0 0 6 13.95 2 4.651 0 228 32.2 1900 43 1 0 2 14 20 4 2 0 0 0 0 6 13.95 2 4.651 0 28.8 32.8 2000 34 0 0 7 11 2 0 0 0 0 0 2 10 0 0 28.1 32.8 2100 20 0 0 0 0 0 <td></td>																							
1900 43 1 0 2 14 20 4 2 0 0 0 0 0 6 13.95 2 4.651 0 0 25.8 30 2000 34 0 0 1 9 11 12 1 0 0 0 0 13 38.24 1 2.941 0 0 28.1 32.8 2100 20 0 0 7 11 2 0 0 0 0 0 13 38.24 1 2.941 0 0 28.1 32.8 2100 20 0 0 7 11 2 0 0 0 0 0 0 0 0 0 0 2.8.1 32.8 2100 18 0 0 3 10 5 0	1700	69	0	0	2	13	37	15	2	0	0	0	0	0	0	17	24.64	2	2.899	0	0	27.6	31.7
2100 20 0 0 7 11 2 0 0 0 0 0 2 10 0 0 0 26.7 29.2 2200 18 0 0 3 10 5 0 0 0 0 0 5 27.78 0 0 0 28.3 31.1 2300 11 0 1 0 1 5 3 1 0																							
2200 18 0 0 3 10 5 0 0 0 0 5 27.78 0 0 0 28.3 31.1 2300 11 0 1 0 1 5 3 1 0 0 0 0 4 36.36 1 9.091 0 0 27.7 34.2 07-19 747 1 7 24 154 368 162 23 6 2 0 0 0 193 25.84 31 4.15 2 0.268 27.5 31.7 06-22 859 2 7 28 186 419 183 26 6 2 0 0 0 217 25.26 34 3.958 2 0.233 27.4 31.7 06-00 888 2 8 28 190 434 191 27 6 2 0 0 0	-																						
07-19 747 1 7 24 154 368 162 23 6 2 0 0 0 193 25.84 31 4.15 2 0.268 27.5 31.7 06-22 859 2 7 28 186 419 183 26 6 2 0 0 0 217 25.26 34 3.958 2 0.233 27.4 31.7 06-00 888 2 8 28 190 434 191 27 6 2 0 0 0 216 25.45 35 3.941 2 0.225 27.5 31.7	2200	18	0	0	0	3	10	5	0	0	0	0	0	0	0	5	27.78	0	0	0	0	28.3	31.1
06-22 859 2 7 28 186 419 183 26 6 2 0 0 0 217 25.26 34 3.958 2 0.233 27.4 31.7 06-00 888 2 8 28 190 434 191 27 6 2 0 0 0 26 25.45 35 3.941 2 0.225 27.5 31.7	-																						
	06-22	859	2	7	28	186	419	183	26	6	2	0	0	0	0	217	25.26	34	3.958	2	0.233	27.4	31.7

	SS314 Glou	uceste	r							Si	ite	Site 1		Loc	ation	Matson I	.ane, Glou	ucester (N	151.839	607 W2.2	220058)	
	0/1/00			to	0'	9 Decen	nber 202	20		Dire	ction	Westb	ound		-	d Limit	ACPO	(SL1)	DfT	(SL2)		
Time	Total Vehicles	0 10	10	15	20	25	30	ed Bins 35	40	45	50	55	60	65	(P 30	SL) 30	35	35	45	45		85%ile
Period 06 Decem		10	15	20	25	30	35	40	45	50	55	60	65	130	•		ACPO	ACPO	DFT	DFT	speed	Speed
0000 0100	<mark>8</mark> 5	0	0	0	1 4	5 1	2 0	0	0	0	0	0	0	0	2 0	25 0	0	0	0	0	29 23.6	-
0200	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.2	-
0300	4	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.5 26.2	-
0500	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.1	•
0600 0700	7 29	0	0	0 5	1 5	2 12	3 5	1	0	0	0	0	0	0	4 6	57.14 20.69	1	14.29 3.448	0	0	31.1 25.7	- 30.9
0800	32	0	0	0	5	13	10	4	0	0	0	0	0	0	14	43.75	4	12.5	0	0	29.7	34.3
0900	71	0	0	1	11	36	18	4	1	0	0	0	0	0	23	32.39	5	7.042	0	0	28.3	33.2
1000 1100	75 65	0	0	2	21 9	36 39	14 15	2	0	0	0	0	0	0	16 17	21.33 26.15	2	2.667 3.077	0	0	26.9 28.4	30.7 32.2
1200	77	0	0	1	20	36	18	1	1	0	0	0	0	0	20	25.97	2	2.597	0	0	27.5	31.5
1300 1400	68 65	1	0	1	13 5	32 37	18 18	3	0	0	0	0	0	0	21 22	30.88 33.85	3	4.412 6.154	0	0	28 28.8	32.8 32.7
1500	38	0	1	2	7	23	4	1	0	0	0	0	0	0	5	13.16	1	2.632	0	0	26.6	29.7
<u>1600</u> 1700	53 39	0	0	0	8 12	25 21	13 4	6 0	1	0	0	0	0	0	20 6	37.74 15.38	7	13.21 5.128	0	0	29.2 27.7	34.4 30.5
1800	46	0	0	0	10	23	13	0	0	0	0	0	0	0	13	28.26	0	0	0	0	28.2	32.3
1900	31	0	0	1	9	14	5	1	1	0	0	0	0	0	7	22.58	2	6.452	0	0	27.4	32.5
2000 2100	36 17	0	0	1 0	11 3	18 11	6 2	0	0	0	0	0	0	0	6 3	16.67 17.65	0	0 5.882	0	0	26.6 27.4	30.5 30.2
2200	9	0	0	0	4	4	1	0	0	0	0	0	0	0	1	11.11	0	0	0	0	25.6	-
2300 07-19	7 658	0	0	0 13	2 126	2 333	3 150	0 28	0 5	0	0	0	0	0	3 183	42.86 27.81	0 33	0 5.015	0	0	28.4	32
06-22	749	2	1	15	150	378	166	31	6	0	0	0	0	0	203	27.0	37	4.94	0	0	27.9	31.8
06-00	765	2	1	15	156	384	170	31	6	0	0	0	0	0	207	27.06	37	4.837	0	0	27.9	31.8
00-00 07 Decem	788 1ber 2020	2	1	15	165	396	172	31	6	0	0	0	0	0	209	26.52	37	4.695	0	0	27.8	31.8
0000	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	-
0100	2	0	0	0	0	1	1	0	0	0	0	0	0	0	1	50 0	0	0	0	0	29.6 24.6	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.0	
0400	2	0	0	0	0	0	1	1	0	0	0	0	0	0	2	100	1	50	0	0	33.3	-
0500	12 11	0	0	0	0	3	4	4	1	0	0	0	0	0	9	75 54.55	5	41.67 0	0	0	33.5 29	39.6 34.2
0700	62	3	0	0	12	37	9	1	0	0	0	0	0	0	10	16.13	1	1.613	0	0	26.6	30.6
0800 0900	133 73	1 0	12 0	17 6	46 14	43 39	12 9	1 3	1	0	0	0	0	0	14 14	10.53 19.18	2 5	1.504 6.849	0	0	23.5 27.2	28.8 31.9
1000	63	0	0	1	13	32	15	1	1	0	0	0	0	0	17	26.98	2	3.175	0	0	27.7	31.3
1100	84	0	1	8	28	32	11	4	0	0	0	0	0	0	15	17.86	4	4.762	0	0	25.9	30.5
1200 1300	73 81	0	0	4	23 20	32 47	12 8	2	0	0	0	0	0	0	14 12	19.18 14.81	2	2.74 4.938	0	0	26.5 27	30.7 30
1400	87	0	1	11	26	39	8	2	0	0	0	0	0	0	10	11.49	2	2.299	0	0	25.1	29.7
1500 1600	113 96	0	3	14 2	40	44 49	9 21	3	0	0	0	0	0	0	12	10.62	3	2.655	0	0	24.7 27	29 31.3
1700	87	0	0	1	19	39	22	4	1	1	0	0	0	0	28	32.18	6	6.897	1	1.149	28.2	31.8
<u>1800</u> 1900	73	0	0	1 6	16	40 13	13	3 1	0	0	0	0	0	0	16 9	21.92 26.47	3	4.11 2.941	0	0	27.7	31.5
2000	34 38	1	0	0	5	18	8	4	0	0	0	0	0	0	13	34.21	4	10.53	0	0	26.3 28.4	33.2 33.3
2100	20	0	0	0	1	13	6	0	0	0	0	0	0	0	6	30	0	0	0	0	28.6	31.7
2200 2300	21 4	0	1	0	2	11 2	7 0	0	0	0	0	0	0	0	7	33.33 25	0	0 25	0	0	27.5 28	30.3
07-19	1025	4	18	67	279	473	149	28	6	1	0	0	0	0	184	17.95	35	3.415	1	0.098	26.2	30.5
06-22	1128 1153	5 5	19	73 74	293 295	520 533	178	33 34	6 6	1	0	0	0	0	218	19.33	40	3.546 3.556	1	0.089	26.4	30.8 30.8
06-00 00-00	1174	5	20 20	74	295	535	185 191	39	7	1	0	0	0	0	226 238	19.6 20.27	41 47	4.003	1	0.087	26.4 26.5	30.8
08 Decem		0	0	0	0	2	0	0	^	0	-	0	-	0	0	0	0	0	0	0	05	
0000	5 0	0	0	0	2 0	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	-
0200	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0300 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 25	0	0	0	0	- 28.3	-
0400	9	0	0	0	0	2	3	4	0	0	0	0	0	0	7	77.78	4	44.44	0	0	33.3	-
0600	15 61	0	0	0 0	1	5 30	8	1	<mark>0</mark> 1	0	0	0	0	0	9	60 21.31	1	6.667	0	0	30.5	32.7 32.7
0700 0800	61 124	0	1	13	17 38	30 61	9 8	3	1	0	0	0	0	0	13 8	21.31 6.452	4	6.557 0	0	0	27.3 24.5	32.7 28.8
0900	79	0	0	1	17	43	14	3	1	0	0	0	0	0	18	22.78	4	5.063	0	0	27.7	32
<u>1000</u> 1100	70 60	0	0	5 5	18 17	32 27	13 9	2	0	0	0	0	0	0	15 10	21.43 16.67	2	2.857 1.667	0	0 1.667	26.6 26.3	31.1 30.6
1200	82	1	2	2	24	40	11	1	1	0	0	0	0	0	13	15.85	2	2.439	0	0	26.1	30.1
1300	57	0	1	3	13	29	10	1	0	0	0	0	0	0	11	19.3	1	1.754	0	0	26.5	30.2
1400 1500	75 118	0	1 7	6 26	25 23	31 43	9 16	3 3	0	0	0	0	0	0	12 19	16 16.1	3	4 2.542	0	0	25.5 24.4	30.5 30.4
1600	82	0	0	0	17	38	20	6	1	0	0	0	0	0	27	32.93	7	8.537	0	0	28.6	33.6
1700 1800	90 72	0	2	4	16 21	48 24	17 16	0	2	0	1	0	0	0	20 23	22.22 31.94	3	3.333 9.722	1	1.111 0	27.7 28.1	31.2 33.8
1900	64	1	0	4 5	21 14	24 31	6	5	2	0	0	0	0	0	13	20.31	7	9.722 10.94	0	0	28.1	33.8
2000	26	0	0	0	4	16	4	1	1	0	0	0	0	0	6	23.08	2	7.692	0	0	28.5	33.3
2100 2200	27	0	0	0	4	15 9	7	0	1	0	0	0	0	0	8	29.63 37.5	1	3.704 6.25	0	0	28.9 28.9	33.8 34.2
2300	7	0	0	1	1	3	1	1	0	0	0	0	0	0	2	28.57	1	14.29	0	0	27.6	-
07-19	970	2	18	69 74	246	446	152	28	7	1	1	0	0	0	189	19.48	37	3.814	2	0.206	26.4	30.8
06-22 06-00	1102 1125	3 3	18 18	74 75	269 271	513 525	177 183	35 37	<u>11</u> 11	<u>1</u> 1	<u>1</u> 1	0	0	0	225 233	20.42	48 50	4.356 4.444	2	0.181 0.178	26.6 26.7	31.1 31.1
00-00	1145	3	18	75	275	533	187	41	11	1	1	0	0	0	241	21.05	54	4.716	2	0.175	26.7	31.2

	SS314 Glo 0/1/00	uceste	r	to	00) Decem	bor 202	0			ite ction	Site 1 Westbo	und	Loc	ation	Matson I	.ane, Glo	ucester (N	151.8396	507 W2.2	220058)	
	0/1/00			10	05	Decem		ed Bins		Dire	CLION	westbo	Junu			d Limit SL)	ACPO) (SL1)	DfT	(SL2)		
Time Period	Total Vehicles	0 10	10 15	15 20	20 25	25 30	30 35	35 40	, 40 45	45 50	50 55	55 60	60 65	65 130	30	30	35 ACPO	35 ACPO	45 DFT	45 DFT		85%ile Speed
09 Decen																			a . 1	<u>.</u>		
0000 0100	3 1	0	0	0	1 0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.9 29.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 33.33	0	0	0	0	- 29	-
0500	7	0	0	0	0	4	1	2	0	0	0	0	0	0	3	42.86	2	28.57	0	0	31.4	-
0600 0700	12 61	0	0	0 6	1 9	1 34	5 10	5 1	0	0	0	0	0	0	10 11	83.33 18.03	5 1	41.67 1.639	0	0	32.3 26.8	35.9 30.5
0800	128	0	3	20	46	38	20	1	0	0	0	0	0	0	21	16.41	1	0.781	0	0	24.7	30.5
0900 1000	79 73	0	1	4	24 19	37 31	9 17	3	0	1	0	0	0	0	13 19	16.46 26.03	4	5.063 2.74	1	1.266 1.37	26.5 27.3	30.8 32.2
1100	66	0	1	2	21	26	14	2	0	0	0	0	0	0	16	24.24	2	3.03	0	0	26.9	32
1200 1300	72 71	0	0	4 5	24 21	30 36	13 7	1	0	0	0	0	0	0	14 8	19.44 11.27	1	1.389 1.408	0	0	26.3 25.8	30.6 29.5
1400	75	0	3	6	22	29	13	2	0	0	0	0	0	0	15	20	2	2.667	0	0	25.7	31.4
1500 1600	106 97	0	2	17 3	38 24	33 44	13 16	3 3	0	0	0	0	0	0	16 20	15.09 20.62	3	2.83 4.124	0	0	24.8 26.1	30.3 31.2
1700	81	0	1	2	19	31	24	3	1	0	0	0	0	0	28	34.57	4	4.938	0	0	28.1	33.2
<u>1800</u> 1900	85 60	0 1	1 0	2	31 15	29 29	19 10	3 4	0	0	0	0	0	0	22 14	25.88 23.33	3 4	3.529 6.667	0	0	26.7 27.5	32 32.8
2000	19	0	0	0	2	8	7	1	0	0	1	0	0	0	9	47.37	2	10.53	1	5.263	30.4	34.4
2100	20	0	0	0	6	8 13	5 4	1	0	0	0	0	0	0	6 5	30	1	5 5	0	0	28.2	32.6
2200 2300	20 5	0	0	0	1	1 <u>3</u> 3	4	0	0	0	0	0	0	0	5 1	25 20	0	5 0	0	0	28.3 28.6	<u>31.6</u> -
07-19 06-22	994	6 7	15	74	298 222	398 444	175	24	2	2	0 1	0	0	0	203 242	20.42	28	2.817	2	0.201	26.2	31.2
06-22	1105 1130	7	15 15	75 76	322 324	444 460	202 207	35 36	2	2	1	0	0	0	242	21.9 21.95	<u>40</u> 41	3.62 3.628	3	0.271	26.4 26.5	31.4 31.4
00-00	1144	7	15	76	325	469	209	38	2	2	1	0	0	0	252	22.03	43	3.759	3	0.262	26.5	31.4
Average 0000	5	0	1	0	1	2	1	0	0	0	0	0	0	0	1	18.18	0	0	0	0	25.1	-
0100	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	12.5	0	0	0	0	23.4	-
0200 0300	2	0	0	0	1 1	1 1	0	0	0	0	0	0	0	0	0	7.143 8.333	0	0 8.333	0	0	24.4 25.7	-
0400	3	0	0	0	1	1	1	0	0	0	0	0	0	0	1	44.44	0	5.556	0	0	28.9	-
0500	8	0	0	0	0	3 5	2	2	0	0	0	0	0	0	4	51.79 47.06	2	28.57 9.412	0	0	31.3 29.3	32.9
0700	51	1	0	3	12	26	8	1	0	0	0	0	0	0	9	18.31	1	2.254	0	0	26.6	30.5
0800 0900	97 68	1 0	3 0	12 3	31 15	37 35	11 11	2	0	0	0	0	0	0	13 14	13.25 21.31	2	1.767 4.852	0	0.211	24.7 27.3	29.8 31.5
1000	65	0	0	3	16	31	13	2	0	0	0	0	0	0	15	22.59	2	2.851	0	0.219	27	31.3
1100 1200	69 75	0	1	3	18 19	30 36	15 14	2	0	0	0	0	0	0	17 16	24.95 21.33	3	3.742 2.857	0	0.416	27.1 26.9	31.4 30.9
1300	70	0	1	3	16	34	14	2	0	0	0	0	0	0	16	23.27	3	3.673	0	0	27.1	31.3
1400 1500	79 94	0	1 3	6 14	21 26	36 36	12 13	2	0	0	0	0	0	0	14 15	18.23 16.19	2	3.069 2.269	0	0	26.1 25.1	30.8 30.2
1600	85	1	1	2	21	38	17	4	1	0	0	0	0	0	22	25.97	5	5.565	0	0	27.3	32.1
1700 1800	80 69	0	0	2	18 18	37 30	18 16	2	1	0	0	0	0	0	22 19	27.47 27.98	3	4.309 5.35	0	0.539	27.8 27.8	31.9 32.3
1900	47	1	0	2	11	22	7	3	0	0	0	0	0	0	10	21.82	3	6.364	0	0	27	31.8
2000 2100	33 21	0	0	1	8	14 11	8 5	1	0	0	0	0	0	0	9 6	28.57 27.59	2	4.762 4.828	0	0.433 0	27.8 28.1	32.2 32
2200	18	0	0	0	3	9	5	0	0	0	0	0	0	0	6	32.26	0	2.419	0	0	28.1	31.3
2300 07-19	8 902	0	0	0 56	1 231	4 407	2 162	0 26	0 5	0	0	0	0	0	2 194	24.56 21.49	0 32	5.263 3.518	0	0 0.127	27.4 26.6	31.1
06-22	1015	3	13	59	256	459	186	31	6	1	0	0	0	0	225	21.49	38	3.788	1	0.127	26.8	31.3
06-00 00-00	1040 1062	3	13 14	60 60	260 264	472 481	193 197	32 35	6 6	1	0	0	0	0	233 239	22.35 22.54	39 42	3.776 3.942	1	0.124	26.8 26.8	31.3 31.3
Virtual W		*	14	00	204	101	191	30	v		U	v	v	v	203	22.34	42	3.342		0.121	20.0	51.5
Mon Tue	1174 1145	5 3	20 18	74 75	297 275	540 533	<mark>191</mark> 187	39 41	7 11	1 1	0	0	0 0	0	238 241	20.27 21.05	47 54	4.003 4.716	1 2	0.085 0.175	26.5 26.7	30.9 31.2
Wed	1145 1144	3 7	15	76	325	469	209	38	2	2	1	0	0	0	241 252	21.05 22.03	54 43	4.716 3.759	2	0.175	26.7	31.2 31.4
Thu Fri	1044 1222	4	22 10	62 88	276 317	437 546	199 229	36 29	8 2	0	0	0	0	0	243 261	23.28 21.36	44 32	4.215 2.619	0 1	0	26.6 26.6	31.4 31.1
Sat	915	4	10	29	193	546 445	195	29 28	6	2	0	0	0	0	201	25.25	32 36	3.934	2	0.082	26.6	31.5
Sun	788 erage	2	1	15	165	396	172	31	6	0	0	0	0	0	209	26.52	37	4.695	0	0	27.8	31.8
5 Day Av	erage 1146	4	17	75	298	505	203	37	6	1	1	0	0	0	247	21.6	44	3.8	1	0.1	26.6	31.2
7 Day Av	erage 1062	4	14	60	264	481	197	35	6	1	0	0	0	0	239	22.5	42	4.0	1	0.1	26.8	31.3
Total Veh		4	14	00	204	401	19/	30	0		U	U	U	U	239	22.3	42	4.0		0.1	20.8	31.3
[]	7432	25	99	419	1848	3366	1382	242	42	6	3	0	0	0	1675	22.5	293	3.9	9	0.1	26.8	31.3
100 -										1		40										
90 -										1			30.9	31.2	31.4	31.4	31.1	31.5	31.8 3	31.2 3	1.3	
80 - 70 -										3	.	30 26	_	26.7	26.5	26.6	26.6 2	27.3 27.1	26.0	26.8		
60 -											·	Γ										Mean
% 50 -												튵20 -										
40 -											¹⁵	-										
30 -	20.27 21.0	5 22	.03	23.28	21.36	5.25 2	<u>6.52</u>	21.6	22.5			10										85%ile
20 -		716		1045			1605				15											
0 -	4 003 4 0 085 4	0175	3759 0,262	4 215 0	² 619 0.082	3 934 0 219	⁴ 695 0	0.1	0.1			۰ II										
-	Mon T	ue	Wed	Thu	Fri	Sat	Sun	5 Day Average	7 Day Average				/lon	Tue	Wed	Thu	Fri	Sat S	un 5 E Ave	Day 7D rage Aver	ay age	
L																						



Appendix D



~2.4m by 45m

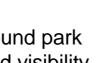
THE REALING MUST BE READ IN CONTINUETION WITH ALL OTHER RELEVANT REALINGS. BO NOT COME FROM THE REALING

calming feature

ilding - 1 no. House

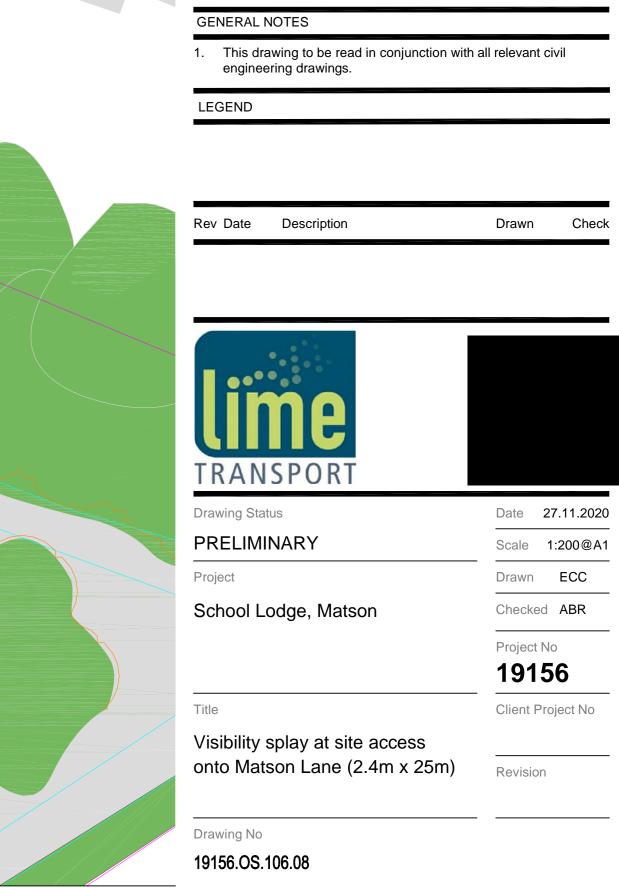
Extent of existing post and rail fence around park to be relocated to accommodate required visibility splay at the proposed site access





Matson





Appendix E



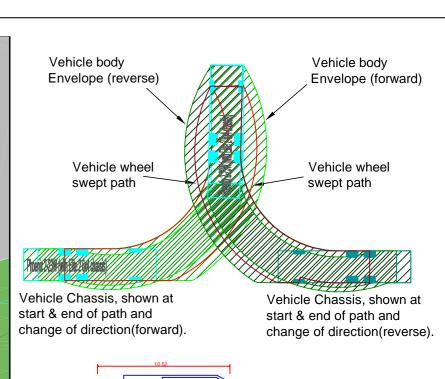
bsed refurbishment to existing building - 1 no. House

DK

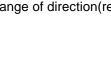
sed refurbishment to existing building - 1 no. House



DK







2.530m 3.211m 0.416m 2.530m 4.00s 9.950m

 This drawing to be read in conjunction engineering drawings. 	on with all relevant civil
LEGEND	
Rev Date Description	Drawn Che
TRANSPORT	
Drawing Status	Date 27.11.20
PRELIMINARY	Scale 1:100@
Project	Drawn ECC
School Lodge, Matson	Checked ABR
	Project No
	19156
Title	Client Project No
Swept parth analysis;	
10.52m Refuse vehicle;	Revision
manoeuvring on-site	

Appendix F



sed refurbishment to existing building - 1 no. House

THE BRANNER MUST BE BEAR IN CONTINUETION WITH ALL OTHER RELEVANT BRANNINGS. BO NOT COME EROM THE BRANNING

DK

DK

sed refurbishment to existing building - 1 no. House

DK



DK



Swept parth analysis; Dennis Sabre Fire Tender; manoeuvring on-site

-----Revision



Appendix G

Lime Transport Limited Stanwell Road Penarth

Calculation Reference: AUDIT-258601-191212-1211

Licence No: 258601

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use	: 03 - RESIDENTIAL	
Category	: D - AFFORDABLE/LOCAL AUTHORITY FLATS	
	ODAL VEHICLES	

Seled	cted regions and areas:	
02	SOUTH EAST	
	ES EAST SUSSEX	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
80	NORTH WEST	
	CH CHESHIRE	1 days
10	WALES	-
	CF CARDIFF	1 days

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

Secondary 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: Actual Range: Range Selected by User:	Number of dwelling 15 to 62 (units:) 6 to 191 (units:)	JS
Parking Spaces Range:	All Surveys Include	ed
Percentage of dwellings priv	vately owned:	All Surveys Included

 Public Transport Provision:
 Include all surveys

Date Range: 01/01/11 to 07/10/16

~ . . .

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.

<u>Selected survey days:</u>	
Tuesday	1 days
Wednesday	1 days
Thursday	3 days
Friday	2 days

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

Selected survey types:	
Manual count	7 days
Directional ATC Count	0 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:	
Town Centre	2
Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	1

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.

Selected Location Sub Categories:	
Residential Zone	5
Built-Up Zone	2

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.

ansport Limited Stanwell Road Penarth Licence No: 25860 Secondary Filtering selection: Image: Construction of the selected set in the selected set is the selected set in the selected set in the selected set in the selected set is the selecte	7.6.3 131019 B1	19.24 Database	right of TRICS Consortium Limited, 2019. All rights reserved	Thursday 12/12/19
Secondary Filtering selection: Use Class: C3 7 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 Ubrary module of TRICS®. Population within 1 mile: 5.001 to 10,000 1 days 5.001 to 50,000 3 days 50,001 to 50,000 3 days 50,001 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 20,001 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 25,001 to 50,000 3 days 125,001 to 50,000 3 days 7/bit data displays the number of selected surveys within stated 5-mile radii of population. Car ownership within 5 miles: 0.601 to 10, 6 days 1.1 to 1.5 1 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. This data displays the number of selected surveys sites. This data displays the number of selected surveys sites. Th				Page 2
Use Cass: C3 T 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 1 mile: 5,001 to 10,000 1 days 25,001 to 50,000 5,001 to 100,000 1 days 3 days 50,001 to 100,000 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 100,001 to 125,000 25,001 to 50,000 1 days 250,001 to 500,000 25,001 to 50,000 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 6 days 1.1 to 1.5 0.6 to 1.0 6 days 1.1 to 1.5 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 6 days 1.1 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	ransport Limited	Stanwell Road	Penarth	Licence No: 258601
C3 7 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 1 mile: 5,001 to 10,000 1 days 15,001 to 50,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 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 125,001 to 50,000 2 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 1 days 125,001 to 50,000 1 days 125,001 to 50,000 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 6 days 1.1 to 1.5 1 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: <td>Secondary Filte</td> <td>ering selection:</td> <td></td> <td></td>	Secondary Filte	ering selection:		
C3 7 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 1 mile: 5,001 to 10,000 1 days 15,001 to 50,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 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 125,001 to 50,000 2 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 1 days 125,001 to 50,000 1 days 125,001 to 50,000 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 6 days 1.1 to 1.5 1 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: <td>Use Class:</td> <td></td> <td></td> <td></td>	Use Class:			
has been used for this purpose, which can be found within the Library module of TRICS®. Papulation within 1 mile: 5,001 to 10,000 1 days 15,001 to 20,000 2 days 50,001 to 100,000 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 100,001 to 125,000 2 days 100,001 to 125,000 2 days 125,001 to 50,000 2 days 125,001 to 50,000 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 6 days 1.1 to 1.5 1 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 Yes 1 days			7 days	
Population within 1 mile: 5,001 to 10,000 1 days 15,001 to 20,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 1 days This data displays the number of selected surveys within stated 1-mile radii of population. Population within 5 miles: 2 25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 500,000 1 days 250,001 to 500,000 1 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 6 days 1.1 to 1.5 1 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. 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. 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: 1 days				se Classes Order 2005
5,001 to 10,000 1 days 15,001 to 20,000 2 days 25,001 to 50,000 3 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 100,001 to 105,000 2 days 100,001 to 125,000 1 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 6 days 1.1 to 1.5 1 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 Yes 1 days	has been used fo	or this purpose, wi	hich can be found within the Library module of TRICS®.	
15,001 to 20,000 2 days 25,001 to 50,000 3 days 50,001 to 100,000 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 100,001 to 125,000 2 days 100,001 to 125,000 1 days 125,001 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 6 days 1.1 to 1.5 1 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	Population within	<u>n 1 mile:</u>		
25,001 to 50,000 3 days 50,001 to 100,000 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 100,001 to 125,000 1 days 125,001 to 50,000 1 days 125,001 to 50,000 1 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 6 days 1.1 to 1.5 1 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 Yes 1 days	5,001 to 10,000)	1 days	
50,001 to 100,000 1 days This data displays the number of selected surveys within stated 1-mile radii of population. <u>Population within 5 miles:</u> 2 25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 250,000 1 days 250,001 to 500,000 3 days This data displays the number of selected surveys within stated 5-mile radii of population. <u>Car ownership within 5 miles:</u> 0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> 1 days	15,001 to 20,000)	2 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 100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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 Yes 1 days	25,001 to 50,000)	3 days	
Population within 5 miles: 25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	50,001 to 100,00	00	1 days	
25,001 to 50,000 2 days 100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	This data display	is the number of s	selected surveys within stated 1-mile radii of population.	
100,001 to 125,000 1 days 125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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 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	Population within	n 5 miles:		
125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	25,001 to 50,00	0	2 days	
125,001 to 250,000 1 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 6 days 1.1 to 1.5 1 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	100,001 to 125,0	000	1 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 6 days 1.1 to 1.5 1 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	125.001 to 250.0	000	5	
Car ownership within 5 miles: 0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days				
0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days	This data display	is the number of s	selected surveys within stated 5-mile radii of population.	
0.6 to 1.0 6 days 1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days	Car ownership w	ithin 5 miles:		
1.1 to 1.5 1 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. <u>Travel Plan:</u> Yes 1 days			6 davs	
Within a radius of 5-miles of selected survey sites. <u>Travel Plan:</u> Yes 1 days				
Within a radius of 5-miles of selected survey sites. <u>Travel Plan:</u> Yes 1 days	This data display	is the number of «	selected surveys within stated ranges of average cars owned per l	residential dwelling
Yes 1 days				esidential avening,
Yes 1 days	Travel Plan [,]			
			1 days	
	No		6 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.

<u>PTAL Rating:</u> No PTAL Present

Li

7 days

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

TRICS 7.6.3 131019 B19.24	Database right of TRICS Consortium Limited, 2019. All rights reserved

Thursday 12/12/19

Licence No: 258601

Page 3

Lime Transport Limited Stanwell Road Penarth

٦

LIST OF SITES relevant to selection parameters

1	CF-03-D-01 BLOCKS OF FLATS TYN-Y-PARC ROAD CARDIFF		CARDIFF
	WHITCHURCH Neighbourhood Centre (PPS6 Local Centre) Residential Zone	24	
2	Total Number of dwellings: Survey date: FRIDAY CH-03-D-01 BLOCK OF FLATS HEATH LANE CHESTER	24 <i>07/10/16</i>	<i>Survey Type: MANUAL</i> CHESHI RE
	BOUGHTON HEATH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	30	
3	Survey date: THURSDAY ES-03-D-05 BLOCKS OF FLATS WALWERS LANE LEWES	24/05/12	<i>Survey Type: MANUAL</i> EAST SUSSEX
	Town Centre Built-Up Zone Total Number of dwellings: <i>Survey date: FRIDAY</i>	24 <i>10/10/14</i>	Survey Type: MANUAL
4	ES-03-D-06 FLATS & HOUSES WELLINGTON ROAD BRIGHTON		EAST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: THURSDAY	15 <i>16/10/14</i>	Survey Type: MANUAL
5	LN-03-D-02 FLATS ADDISON DRIVE LINCOLN		LI NCOLNSHI RE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: WEDNESDAY	22 <i>01/07/15</i>	Survey Type: MANUAL
6	NT-03-D-02 BLOCK OF FLATS WATCOMBE ROAD NOTTINGHAM CARRINGTON		NOTTINGHAMSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: Survey date: TUESDAY	22 <i>23/06/15</i>	Survey Type: MANUAL
7	WK-03-D-01 BLOCKS OF FLATS QUEEN VICTORIA ROAD COVENTRY	_0,00,70	WARWICKSHIRE
	Town Centre Built-Up Zone Total Number of dwellings:	62	
	Survey date: THURSDAY	62 1 <i>7/10/13</i>	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/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI -MODAL VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.055	7	28	0.101	7	28	0.156
08:00 - 09:00	7	28	0.065	7	28	0.111	7	28	0.176
09:00 - 10:00	7	28	0.085	7	28	0.095	7	28	0.180
10:00 - 11:00	7	28	0.080	7	28	0.090	7	28	0.170
11:00 - 12:00	7	28	0.070	7	28	0.045	7	28	0.115
12:00 - 13:00	7	28	0.075	7	28	0.095	7	28	0.170
13:00 - 14:00	7	28	0.085	7	28	0.080	7	28	0.165
14:00 - 15:00	7	28	0.085	7	28	0.065	7	28	0.150
15:00 - 16:00	7	28	0.070	7	28	0.070	7	28	0.140
16:00 - 17:00	7	28	0.106	7	28	0.050	7	28	0.156
17:00 - 18:00	7	28	0.136	7	28	0.095	7	28	0.231
18:00 - 19:00	7	28	0.095	7	28	0.075	7	28	0.170
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.007			0.972			1.979

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	15 - 62 (units:)
Survey date date range:	01/01/11 - 07/10/16
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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.

Licence No: 258601

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL CYCLISTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS		[DEPARTURES	;		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.000	7	28	0.010	7	28	0.010
08:00 - 09:00	7	28	0.015	7	28	0.015	7	28	0.030
09:00 - 10:00	7	28	0.010	7	28	0.010	7	28	0.020
10:00 - 11:00	7	28	0.010	7	28	0.000	7	28	0.010
11:00 - 12:00	7	28	0.000	7	28	0.005	7	28	0.005
12:00 - 13:00	7	28	0.020	7	28	0.000	7	28	0.020
13:00 - 14:00	7	28	0.000	7	28	0.000	7	28	0.000
14:00 - 15:00	7	28	0.005	7	28	0.000	7	28	0.005
15:00 - 16:00	7	28	0.005	7	28	0.015	7	28	0.020
16:00 - 17:00	7	28	0.005	7	28	0.025	7	28	0.030
17:00 - 18:00	7	28	0.020	7	28	0.000	7	28	0.020
18:00 - 19:00	7	28	0.000	7	28	0.000	7	28	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.090			0.080			0.170

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.

Licence No: 258601

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI-MODAL PEDESTRIANS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES	;		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.015	7	28	0.030	7	28	0.045
08:00 - 09:00	7	28	0.065	7	28	0.161	7	28	0.226
09:00 - 10:00	7	28	0.116	7	28	0.131	7	28	0.247
10:00 - 11:00	7	28	0.111	7	28	0.111	7	28	0.222
11:00 - 12:00	7	28	0.116	7	28	0.131	7	28	0.247
12:00 - 13:00	7	28	0.106	7	28	0.090	7	28	0.196
13:00 - 14:00	7	28	0.126	7	28	0.166	7	28	0.292
14:00 - 15:00	7	28	0.121	7	28	0.101	7	28	0.222
15:00 - 16:00	7	28	0.226	7	28	0.146	7	28	0.372
16:00 - 17:00	7	28	0.121	7	28	0.090	7	28	0.211
17:00 - 18:00	7	28	0.146	7	28	0.106	7	28	0.252
18:00 - 19:00	7	28	0.065	7	28	0.080	7	28	0.145
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.334			1.343			2.677

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.

Licence No: 258601

Lime Transport Limited Stanwell Road Penarth

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI - MODAL PUBLIC TRANSPORT USERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.000	7	28	0.050	7	28	0.050
08:00 - 09:00	7	28	0.005	7	28	0.015	7	28	0.020
09:00 - 10:00	7	28	0.005	7	28	0.030	7	28	0.035
10:00 - 11:00	7	28	0.010	7	28	0.055	7	28	0.065
11:00 - 12:00	7	28	0.010	7	28	0.030	7	28	0.040
12:00 - 13:00	7	28	0.015	7	28	0.030	7	28	0.045
13:00 - 14:00	7	28	0.035	7	28	0.030	7	28	0.065
14:00 - 15:00	7	28	0.020	7	28	0.030	7	28	0.050
15:00 - 16:00	7	28	0.035	7	28	0.020	7	28	0.055
16:00 - 17:00	7	28	0.060	7	28	0.040	7	28	0.100
17:00 - 18:00	7	28	0.055	7	28	0.005	7	28	0.060
18:00 - 19:00	7	28	0.045	7	28	0.010	7	28	0.055
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.295			0.345			0.640

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.

Licence No: 258601

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS MULTI - MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES	;	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	28	0.080	7	28	0.221	7	28	0.301
08:00 - 09:00	7	28	0.161	7	28	0.377	7	28	0.538
09:00 - 10:00	7	28	0.216	7	28	0.281	7	28	0.497
10:00 - 11:00	7	28	0.241	7	28	0.286	7	28	0.527
11:00 - 12:00	7	28	0.206	7	28	0.221	7	28	0.427
12:00 - 13:00	7	28	0.246	7	28	0.226	7	28	0.472
13:00 - 14:00	7	28	0.236	7	28	0.296	7	28	0.532
14:00 - 15:00	7	28	0.261	7	28	0.216	7	28	0.477
15:00 - 16:00	7	28	0.357	7	28	0.266	7	28	0.623
16:00 - 17:00	7	28	0.372	7	28	0.221	7	28	0.593
17:00 - 18:00	7	28	0.362	7	28	0.256	7	28	0.618
18:00 - 19:00	7	28	0.236	7	28	0.181	7	28	0.417
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.974			3.048			6.022

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.



Cotswold Archaeology

School Lodge Matson, Gloucester

Heritage Desk-Based Assessment



Report prepared for: Gloucester City Homes

CA Project: CR0172

CA Report: CR0172_1

September 2019 (Updated Nov 2020 and March 2022)

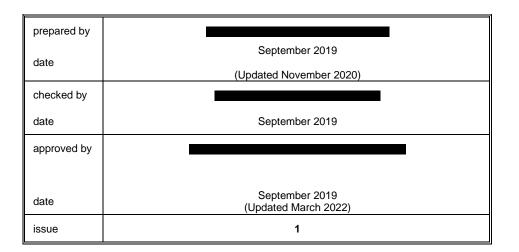


School Lodge, Matson, Gloucester

Heritage Desk-Based Assessment

CA Project: CR0172

CA Report: CR0172_1



This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

Cirencester	Milton Keynes	Andover	Exeter	Suffolk
Building 11	Unit 8 – The IO Centre	Stanley House	Unit 1 – Clyst Units	Unit 5, Plot 11
Kemble Enterprise Park	Fingle Drive	Walworth Road	Cofton Road	Maitland Road
Cirencester	Stonebridge	Andover	Marsh Barton	Lion Barn Industrial
Gloucestershire	Milton Keynes	Hampshire	Exeter	Estate
GL7 6BQ	Buckinghamshire	SP10 5LH	EX2 8QW	Needham Market
	MK13 0AT			Suffolk IP6 8NZ

CONTENTS

1.	INTRODUCTION	.4
2.	METHODOLOGY	.9
3.	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	.16
4.	ARCHAEOLOGICAL SIGNIFICANCE & POTENTIAL EFFECTS	.28
5.	THE SETTING OF HERITAGE ASSETS	.37
6.	CONCLUSIONS	.45
7.	REFERENCES	.47

ILLUSTRATIONS

Figure 1 Site location plan Figure 2 School Lodge and surviving gate pier Figure 3 The grounds associated with School Lodge Figure 4 Romano-British and Saxon heritage assets Figure 5 Known and potential medieval and post-medieval heritage assets Figure 6 An extract from the Gloucester Inclosure of 1799 Figure 7 An extract from the Upton Saint Leonards Tithe of 1841 Figure 8 The south-west facing elevation of School Lodge Figure 9 The punched opening next to the principle entrance (south-west facing elevation) Figure 10 The south-east facing elevation Figure 11 The north-east facing elevation Figure 12 Detail showing the patio cover and patio floor Figure 13 The north-west facing elevation of School Lodge Figure 14 The current principal entrance Figure 15 Cloak space beneath the stairs next to the principle entrance Figure 16 The Easternmost reception room Figure 17 The westernmost reception room Figure 18 The staircase in the westernmost reception room Figure 19 The chamfered newel post with squared acorn newel cap Figure 20 The bedroom adjoining the bathroom Figure 21 The fireplace in the bedroom adjoining the bathroom Figure 22 The larger bedroom Figure 23 Fireplace within the larger bedroom Figure 24 The upstairs bathroom Figure 25 The setting of heritage assets Figure 26 View next to the scheduled monument from Matson Lane towards the Site.

Figure 27 View from School Lodge towards Matson House (Figure 25, 2)

SUMMARY

Project Name: School Lodge, Matson Location: Gloucester NGR: 384990 215662

This assessment was undertaken in order to assess any heritage impacts relating to the redevelopment of the proposed development site (the Site). The proposed development comprises the retention and restoration of School Lodge to provide a community use with a café (Class F2). A single new two-storey block (comprising nine one-bedroom apartments) is proposed to the rear of the lodge, with associated parking and landscaping.

The Site includes School Lodge (and associated gate piers), which forms part of the curtilage of the Grade II* listed Matson House and is thus curtilage listed. The house is an early to mid-19th-century dwelling of some heritage significance which is presently in a state of disrepair. The proposed development includes for the restoration of School Lodge which would see its external elevations repaired and restored without alteration, resulting in a heritage benefit in relation to its heritage significance. However, the internal changes to School Lodge will result in the loss of its original Victorian layout and, as such, will change its character and thus require Listed Building Consent.

The Site has some potential for archaeological remains, particularly Romano-British and Saxon settlement remains, with some potential for medieval deposits associated with settlement.

With regards to the setting of heritage assets, the proposed development would result in changes to part of the setting of the Grade II* listed Matson House. The proposed repair and restoration of the external elevations of School Lodge would have a positive effect on the significance of Matson House, enhancing part of its physical environs which make a positive contribution towards its significance. However, the addition of a proposed new apartment block in close proximity to its former lodge (School Lodge) would comprise a negative change to the setting of Matson House. This negative change would result in less than substantial harm to the significance of Matson House, at the lower end of less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal'.

1. INTRODUCTION

- 1.1. In July 2019, Cotswold Archaeology was commissioned by Gloucester City Homes to undertake a Heritage Desk-Based Assessment of School Lodge, Matson, Gloucester and its associated land (hereafter referred to as 'the Site'). The Site lies south of Matson Lane, *c.*2.7km south-east of central Gloucester (NGR: 384990 215662; Figure 1). The report has subsequently been updated (in November 2020 and March 2022) to take account of revisions to the design proposals, and updates to the NPPF.
- 1.2. The Site (Figure 1) incorporates School Lodge (Figure 2, below), which dates the early to mid-19th-century (built between 1799 and 1841 according to historic mapping), and is presently unoccupied. The grounds extending from the lodge, presumably its former garden, form the remainder of the Site, and are overgrown, though former footpaths can be seen beneath the scrub (Figure 3).
- 1.3. School Lodge was formerly an entrance lodge for the Grade II* listed Matson House, located *c*.230m to the south. School Lodge now lies under separate ownership, and the former principle driveway which once passed the Lodge has since been relocated further south towards Matson House.
- 1.4. The proposed development comprises the retention and restoration of School Lodge to provide a community use with a café (Class F2). A single new two-storey block (comprising nine one-bedroom apartments) is proposed to the rear of the lodge, with associated parking and landscaping.

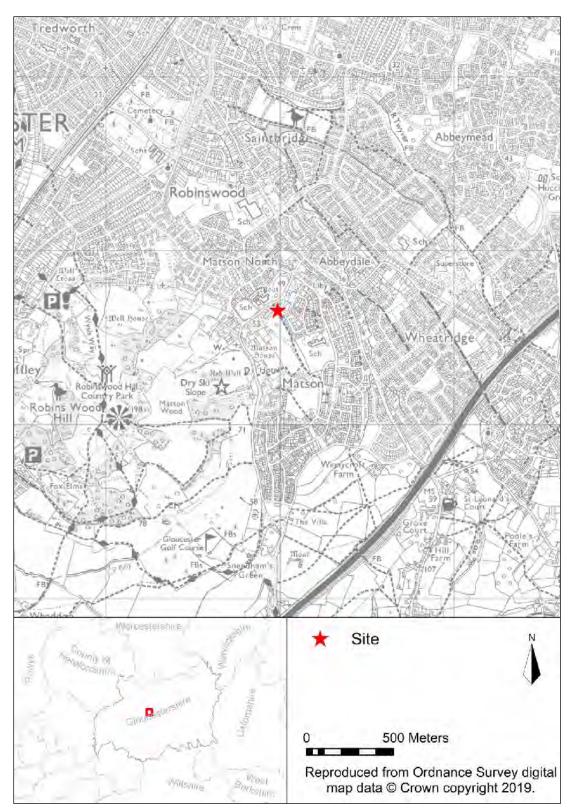


Figure 1 Site location plan



Figure 2 School Lodge and surviving gate pier

Figure 3 The grounds associated with School Lodge

Objectives and professional standards

- 1.5. The composition and development of the historic environment within the Site and wider landscape are discussed in this report. A determination of the significance of any heritage assets located within the Site, and any heritage assets beyond the Site boundary that may potentially be affected by the development proposals, is presented. Any potential development effects upon the significance of these heritage assets (both adverse and/or beneficial) are then described.
- 1.6. Cotswold Archaeology is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA). This report has been prepared in accordance with appropriate standards and guidance, including the 'Standard and Guidance for Historic Environment Desk-Based Assessment' published by CIfA (2017). This states that, insofar as they relate to the determination of planning applications, heritage desk-based assessments should:

"...enable reasoned proposals and decisions to be made [as to] whether to mitigate, offset or accept without further intervention [any identified heritage] impact' (CIfA 2017, 4).

1.7. The 'Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment' (Historic England 2015), further clarifies that a desk-based assessment should:

"...determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area, and the impact of the proposed development on the significance of the historic environment, or will identify the need for further evaluation" (Historic England 2015, 3).

Statute, policy and guidance context

- 1.8. The Site is located in the local authority of Gloucestershire City Council. The Joint Core Strategy (JCS) was adopted by Gloucester City Council in December 2017. Those sections of the JCS which are relevant to heritage and the proposed development are reproduced in Appendix 1. The Interim Adoption Supplementary Planning Document: Development Affecting Sites of Historic Environment (Archaeological) Interest (Gloucester City Council, 2008) is also applicable.
- 1.9. This assessment has been undertaken within the key statute, policy and guidance context presented within Table 1.1. The applicable provisions contained within these statute, policy and guidance documents are referred to, and discussed, as relevant, throughout the text. Fuller detail is provided in Appendix 1.

Consultation

- 1.10. The scope of the present assessment was discussed and agreed with Mr Andrew Armstrong, Archaeologist at Gloucester City Council. It was agreed that a study area of 300m would be sufficient for heritage data searches.
- 1.11. A Pre-Application Consultation response was provided by Charlotte Bowles-Lewis, Principle Conservation Officer at Gloucester City Council (dates 28 June 2019). The response recommends a heritage assessment be undertaken in order to inform the application. The assessment should include an assessment of non-physical impacts (i.e. the setting of heritage assets).

Statute	Description
Ancient Monuments and Archaeological Areas Act (1979)	Act of Parliament providing for the maintenance of a schedule of archaeological remains of the highest significance, affording them statutory protection.
Planning (Listed Buildings and Conservation Areas) Act (1990)	Act of Parliament placing a duty upon the Local Planning Authority (or, as the case may be, the Secretary of State) to afford due consideration to the preservation of Listed Buildings and their settings (under Section 66(1)), and Conservation Areas (under Section 72(2)), in determining planning applications.
National Heritage Act 1983 (amended 2002)	One of four Acts of Parliament providing for the protection and management of the historic environment, including the establishment of the Historic Monuments & Buildings Commission, now Historic England.
Joint Core Strategy (adopted 2017)	Comprises the local development plan (local plan), as required to be compiled, published and maintained by the local authority, consistent with the requirements of the NPPF (2021). Intended to be the primary planning policy document against which planning proposals within that local authority jurisdiction are assessed. Where the development plan is found to be inadequate, primacy reverts to the NPPF (2021).
Conservation Principles (Historic England 2008)	Guidance for assessing heritage significance, with reference to contributing heritage values, in particular: <i>evidential</i> (archaeological), <i>historical</i> (illustrative and associative), <i>aesthetic</i> , and <i>communal</i> .
National Planning Policy Framework (2021)	Provides the English government's national planning policies and describes how these are expected to be applied within the planning system. Heritage is subject of Chapter 16.
Good Practice Advice in Planning: Note 2 (GPA2): Managing Significance in Decision-Taking in the Historic Environment (Historic England, 2015)	Provides useful information on assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing and design and distinctiveness.
Good Practice Advice in Planning: Note 3 (GPA3): The Setting of Heritage Assets, Second Edition (Historic England, 2017)	Provides guidance on managing change within the settings of heritage assets, including archaeological remains and historic buildings, sites, areas, and landscapes.

Table 1.1Key statute, policy and guidance

2. METHODOLOGY

Data collection, analysis and presentation

2.1. This assessment has been informed by a proportionate level of information sufficient to understand the archaeological potential of the Site, the significance of identified heritage assets, and any potential development effects. This approach is in accordance with the provisions of the NPPF (2021) and the guidance issued by ClfA (2017). The data has been collected from a wide variety of sources, summarised in Table 2.1.

Source	Data
National Heritage List for England (NHLE)	Current information relating to designated heritage assets, and heritage assets considered to be 'at risk'.
Gloucestershire Historic Environment Record (HER)	Heritage sites and events records, Historic Landscape Characterisation (HLC) data, and other spatial data supplied in digital format (shapefiles) and hardcopy.
Historic England Archives (HEA)	Additional sites and events records, supplied in digital and hardcopy formats.
Gloucestershire Archives and the Know Your Place website	Historic mapping, historic documentation, and relevant published and grey literature.
Genealogist, Envirocheck, National Library of Scotland & other cartographic websites	Historic (Ordnance Survey and Tithe) mapping in digital format.
British Geological Survey (BGS) website	UK geological mapping (bedrock & superficial deposits) & borehole data.

Table 2.1Key data sources

- 2.2. Historic mapping of the Site was reviewed using the Know Your Place website, as credited throughout. Gloucestershire archives note that, where mapping is available via the Know Your Place website, these will not be produced in hard copy at the archives.
- 2.3. As noted above, the Archaeologist at Gloucester City Council advised a 300m buffer, measured from the boundaries of the Site, would be sufficient to capture the relevant HER data, and provide the necessary context for understanding archaeological potential and heritage significance in respect of the Site. All of the spatial data held by the HER the primary historic data repository for the land within the study area, was requested. The records were analysed and further

refined in order to narrow the research focus onto those of relevance to the present assessment. Not all HER records are therefore referred to, discussed or illustrated further within the body of this report, only those that are relevant. These are listed in a cross-referenced gazetteer provided at the end of this report (Appendix 2) and are illustrated on the figures accompanying this report.

- 2.4. A site visit was also undertaken as part of this assessment. The primary objectives of the site visit were;
 - to undertake the historic building recording;
 - to assess the Site's historic landscape context, including its association with any known or potential heritage assets; and
 - to identify any evidence for previous truncation of the on-site stratigraphy.
- 2.5. The site visit also allowed for the identification of any previously unknown heritage assets within the Site, and assessment of their nature, condition, significance and potential susceptibility to impact. The wider landscape was examined (including those heritage assets identified for setting assessments), as relevant, from accessible public rights of way.

Aerial photographs held at Historic England Archives

2.6. Aerial photographs were not requested for the present assessment.

LiDAR imagery

2.7. Environment Agency LiDAR coverage was available for the Site at 1m and 2m resolution. LiDAR imagery was reviewed at both resolutions, and did not provide sufficient detail of the Site to warrant inclusion within the present assessment.

Previous archaeological investigations

2.8. No previous archaeological works are recorded within the Site. However, a number of previous investigations have been undertaken within the Study Area. Of particular relevance to the Site is an archaeological watching brief undertaken in 1996 c.65m north-east of the Site, which recorded remains relating to possible 1st – 4th century occupation, and some evidence relating to a possible late early-medieval trackway. The results of this watching brief and other relevant previous archaeological works are discussed in detail below in Section 3 (Archaeological and Historical Background). Report references are provided in Section 8 (References).

Historic building survey

- 2.9. The historic building survey has been undertaken in line with the Historic England Guidance Understanding Historic Buildings: A Guide to Good Recording Practice (2016) and equates to a Level 2 Building Recording. A Level 2 Recording comprises a descriptive record, and includes examination of both the interior and exterior of the building, which have been photographed and described.
- 2.10. With regards to the drawn record, a Level 2 Building Recording may include sketch or measured plans.
- 2.11. The photographic record will include:
 - A general view or views of the building;
 - The buildings external appearance. These include a series of oblique views showing all external elevations of the building and giving an overall impression of its size and shape; and
 - The overall appearance of the principle rooms and circulation areas.
- 2.12. The written record includes the precise location of the building as an address and in the form of a National Grid reference. A note on statutory listing is provided; School Lodge is not principally listed, though it does form part of the curtilage of a Grade II* listed building, Matson House. The date the record was made and the name of the recorder and location of any archive material is noted. A summary statement is provided for School Lodge which summarises its form, function, date and sequence of development. The names of architects, builders, patrons and owners are given where known.

Assessment of heritage significance

2.13. The significance of known and potential heritage assets within the Site, and any beyond the Site which may be affected by the proposed development, has been assessed and described, in accordance with paragraph 189 of the NPPF (2021), the guidance issued by CIfA (2017) and 'Historic Environment Good Practice Advice in Planning Note 2' (Historic England 2015). Determination of significance has been undertaken according to the industry-standard guidance on assessing heritage value provided within 'Conservation Principles' (Historic England 2008). This approach considers heritage significance to derive from a combination of discrete heritage values, principal amongst which are: i) evidential (archaeological) value, ii) historic (illustrative and associative) value, iii) aesthetic value, iv)

communal value, amongst others. Further detail of this approach, including the detailed definition of those aforementioned values, as set out, and advocated, by Historic England, is provided in Appendix 1 of this report.

Assessment of potential development effects (benefit and harm)

- 2.14. The present report sets out the ways in which identified susceptible heritage assets might be affected by the proposals, as well as the anticipated extent of any such effects. Both physical effects, i.e. resulting from the direct truncation of archaeological remains, and non-physical effects, i.e. resulting from changes to the setting of heritage assets, have been assessed. With regard to non-physical effects or 'settings assessment', the five-step assessment methodology advocated by Historic England, and set out in the Second Edition of GPA3 (Historic England, 2017), has been adhered to (presented in greater detail in Appendix 1).
- 2.15. Identified effects upon heritage assets have been defined within broad 'level of effect' categories (Table 2.2 below). These are consistent with key national heritage policy and guidance terminology, particularly that of the NPPF (2021). This has been done in order to improve the intelligibility of the assessment results for purposes of quick reference and ready comprehension. These broad determinations of level of effect should be viewed within the context of the qualifying discussions of significance and impact presented in this report.
- 2.16. It should be noted that the overall effect of development proposals upon the designated heritage asset are judged, bearing in mind both any specific harms or benefits (an approach consistent with the Court of Appeal judgement *Palmer v. Herefordshire Council & ANR* Neutral Citation Number [2016] EWCA Civ 1061).
- 2.17. In relation to non-designated heritage assets, the key applicable policy is paragraph 203 of the NPPF (2021), which states that:

'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset [our emphasis].' 2.18. Thus with regard to non-designated heritage assets, this report seeks to identify the significance of the heritage asset(s) which may be affected, and the scale of any harm or loss to that significance.

Level of effect	Description	Applicable statute & policy
Heritage benefit	The proposals would better enhance or reveal the heritage significance of the heritage asset.	Enhancing or better revealing the significance of a heritage asset is a desirable development outcome in respect of heritage. It is consistent with key policy and guidance, including the NPPF (2021) paragraphs 190 and 206.
No harm	The proposals would preserve the significance of the heritage asset.	Preserving a Listed building and its setting is consistent with s66 of the Planning (Listed Buildings and Conservation Areas) Act (1990). Preserving or enhancing the character or appearance of a Conservation Area is consistent with s72 of the Act. Sustaining the significance of a heritage asset is consistent with paragraph 185 of the NPPF, and should be at the core of any material local planning policies in respect of heritage.
Less than substantial harm (lower end)	The proposals would be anticipated to result in a restricted level of harm to the significance of the heritage asset, such that the asset's contributing heritage values would be largely preserved.	In determining an application, this level of harm should be weighed against the public benefits of the proposals, as per paragraph 202 of the NPPF (2021). Proposals involving change to a Listed building or its setting, or any features of
Less than substantial harm (upper end)	The proposals would lead to a notable level of harm to the significance of the heritage asset. A reduced, but appreciable, degree of its heritage significance would remain.	special architectural or historic interest which it possesses, or change to the character or appearance of Conservation Areas, must also be considered within the context of Sections 7, 66(1) and 72(2) of the 1990 Act. <i>The provisions of the Act do</i> <i>not apply to the setting of Conservation</i> <i>Areas</i> . Proposals with the potential to physically affect a Scheduled Monument (including the ground beneath that monument) will be subject to the provisions of the Ancient Monuments and Archaeological Areas Act (1979); these provisions do not apply to proposals involving changes to the setting of Scheduled Monuments. With regard to non-designated heritage assets, the scale of harm or loss should be weighed against the significance of the asset, in accordance with paragraph 203 of the NPPF.

Level of effect	Description	Applicable statute & policy
Substantial harm	The proposals would very much reduce the heritage asset's significance or vitiate that significance altogether.	Paragraphs 200 - 202 of the NPPF (2022) would apply. Sections 7, 66(1) and 72(2) of the Planning Act (1990), and the Ancient Monuments and Archaeological Areas Act (1979), may also apply. In relation to non-designated heritage assets, the scale of harm or loss should be weighed against the significance of the asset, in accordance with paragraph 203 of the NPPF.

Table 2.2Summary of level of effect categories (benefit and harm) referred to in this report
in relation to heritage assets, and the applicable statute and policy.

Limitations of the assessment

- 2.19. This assessment is principally a desk-based study, and has utilised secondary information derived from a variety of sources, only some of which have been directly examined for the purpose of this assessment. The assumption is made that this data, as well as that derived from secondary sources, is reasonably accurate. The records held by HER and HEA are not a record of all surviving heritage assets, but a record of the discovery of a wide range of archaeological and historical components of the historic environment. The information held within these repositories is not complete, and does not preclude the subsequent discovery of further elements of the historic environment that are, at present, unknown.
- 2.20. Aerial photographs were not reviewed as part of this assessment as the Site is covered by the National Mapping Programme; shapefiles locating cropmarks identified during the survey were provided by the HER.
- 2.21. A selection of archival material pertaining to the Site and study area was consulted in person at Gloucestershire Archives. There may be other relevant material held by the National Archives, other local repositories, and in private collections; which have not been reviewed as part of the present assessment.
- 2.22. A walkover survey was conducted within the Site in August 2019, which was undertaken in dry and clear weather conditions. Access was afforded within the Site and School Lodge. Observations within the Site were limited since archaeological remains can survive below-ground with no visible surface indications of their presence and the Site is overgrown (Figure 3, above). It is possible therefore that

unknown archaeological remains may be present within the Site. There was also sufficient access to heritage assets beyond the Site to assess likely impacts upon their significance due to changes to their setting associated with the proposed development.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Landscape context

- 3.1. The Site lies at the foot of Robinswood Hill, which is immediately south-west of the Site, and the summit of which sits at c.180m aOD. The Site itself lies at c.50m aOD. The River Twyver runs broadly north-west/south-east c.1km north-east of the Site at its nearest extent.
- 3.2. The underlying geology of the Site is mapped by British Geological Survey (BGS) as Lias Formation and Charmouth Mudstone Formation, both sedimentary bedrocks (BGS, accessed August 2019). No superficial deposits are recorded. No borehole scans are recorded within the Site or its immediate vicinity, however, proximate excavations encountered the natural between 0.7m and 1.2m below the ground level with some archaeological features encountered at *c*.0.5m below ground level (more detail below).

Designated heritage assets

- 3.3. School Lodge comprises a curtilage listed structure associated with the Grade II* listed Matson House. School Lodge is discussed further within the relevant period sections below.
- 3.4. Any further relevant designated heritage assets located in the Site environs, including Matson House, are discussed in the period sections below.

Prehistoric

- 3.5. No prehistoric finds or features are recorded within the Site or the study area and there is very little evidence for prehistoric activity within Gloucester more widely.
- 3.6. The Site is thus considered to have negligible potential for prehistoric remains.

Romano-British and Saxon

- 3.7. No Romano-British or Saxon finds or features are recorded within the Site.
- 3.8. Two watching briefs undertaken in 1985 (Figure 4, **5a**) and in 1996 (Figure 4, **5b**) have identified evidence for a settlement occupied from the 1st century to the 4th-century, with evidence of subsequent 5th to early 7th century activity. An archaeological evaluation undertaken in 1995 (HER ref 10197) in the same area as the watching brief of 1996 recorded only modern deposits, perhaps indicating the fragmentary nature of the remains. A watching brief undertaken in 2014

immediately north of the suspected settlement site also recorded no archaeological remains owing to modern truncation across the site (HER ref 853).

- 3.9. The earliest evidence is that of a possible 1st-century Roman farmstead, represented by a linear ditch estimated to be *c*.1.5m wider and 'U' shaped in profile and aligned broadly north-west / south-east, which was interrupted by a *c*.5m wide gap (see Figure 4, **A**) that was interpreted as an enclosure entrance (Garrod, 1996). Part of a possible eves drip ditch or soakaway was recorded further south-west of the 'opening', i.e. within the possible enclosure (Figure 4, **B**), and may represent the remains of a former building e.g. a dwelling. These features contained both 1st and possible 2nd-century pottery.
- 3.10. The second phase of occupation is interpreted as a possible 2nd to 4th-century Romano-British villa site, represented by a second continuous 'U' shaped ditch running parallel to the earlier enclosure ditch but further north (Figure 4, **C**). The report notes that the limited amount of finds (consisting of occasional pottery sherds) indicates that the focus of this later phase of occupation had likely shifted, and suggests further south-west (i.e. towards the Site) towards the higher ground would be a likely place for the subsequent villa (*ibid*).
- 3.11. The final phase of activity recorded was that of a possible trackway, represented by two parallel 'U' shaped ditches spaced *c*.2m apart and aligned broadly north-east / south-west (Figure 4, **D**). The ditches contained evidence of metalling as well as sherds of 5th to early 7th-century pottery. Further Saxon remains within the study area were recorded during excavations of the scheduled moat adjacent to the Site (see Figure 5, **1**) in the 1950s, during which the outer bank of which was found to be sealing Saxon remains including a possible hearth, indicating possible settlement. Saxon remains are rare in this area and, as such, these remains are of considerable interest.
- 3.12. The features recorded just south of this occupation and activity in 1985 (Figure 4, 5a), including a further 'U' shaped profile ditch and possible pit / linear features, are almost certainly associated. The features were originally thought to have contained later 11th to 12th-century pottery sherds, though a later re-appraisal of the assemblage identified some residual sherds of mid to late 1st-century date and a sherd of 5th to 7th-century pottery was identified from the pit feature (Garrod, 1998).

- 3.13. By the end of the 1st century a *colonia*, a settlement for veteran soldiers called *Colonia Nervia Glevensium* had been established at the site of the present city centre of Gloucester. It has been suggested that the possible Romano-British settlement represents early military settlement (Garrod, 1985) prior to the establishment of the colonia.
- 3.14. Romano-British pottery was reputedly found in 1878 at the site of Matson Rectory immediately north-east of the Site within an earthwork recorded as a possible moat or trench (see Figure 5, 8), which Gloucester Museum subsequently suggested might be a Civil War earthwork (as per the HER record). This pottery, no quantities or further details of which are known, is thus interpreted as residual, likely associated with the possible Romano-British settlement.
- 3.15. In summary, the Site lies in proximity to evidence for Romano-British settlement and to some evidence for Saxon activity, the exact nature and extent of which is presently unknown. On this basis, the Site is considered to have potential for both Romano-British and Saxon deposits associated with these recorded features.

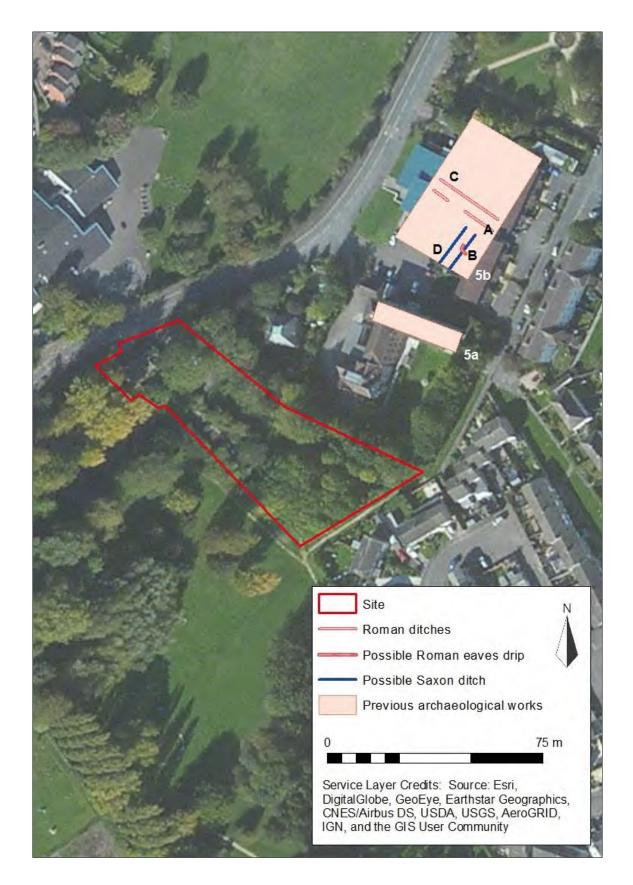


Figure 4 Romano-British and Saxon heritage assets

Medieval to Modern

- 3.16. Medieval/Post-medieval ridge and furrow has been recorded extending across the southern half of the Site (Figure 5). The HER notes that the remains are likely to be extant in the Robinswood Hill area, though elsewhere the remains are likely to have been removed by housing development; the Site was overgrown with extensive scrub and trees at the time of the walkover survey, however the presence of footpaths associated with the former lodges landscaped gardens indicates very limited potential for the survival of such features above ground; below ground remains of such features may survive. The presence of ridge and furrow in the south-east of the Site demonstrates that at least this area of the Site formed part of the agricultural landscape. If the ridge and furrow was medieval in origin, then it would indicate that the Site lay within one of the large manorial arable open fields (see Section 3.17, below). It should be noted that this coverage doesn't provide a record of the full extent of ridge and furrow during these periods, just that which was visible from the 1940s onwards and has subsequently been identified using aerial photographs as part of the National Mapping Programme.
- 3.17. The Site is situated within the historic parish of Matson, in which Matson settlement comprised a small hamlet. There is no direct entry in the Domesday Survey of 1086 for Matson, though it is possible that it was recorded as part of the settlement of Upton St John at this time, as per later parish boundaries (see below). Whilst no settlement was recorded in 1086, the archaeological evidence (described above) indicates at least some form of post-Roman and pre medieval settlement at Matson. The Manor of Matson was in the ownership of Llanthony Priory by 1378, and census records show that only 9 houses were extant in c.1710 and 8 in 1801 (Herbert, 1988). Matson would thus have been a small village, the focus of which is believed to have been on the western side of Matson Lane, near to the former medieval church of St Katherine's Church c.290m south-west of the Site (Figure 5, 6) which has medieval origins but was subject to rebuilding in 1739 and 1893. The site of a second possible chapel is recorded c.280m north of the Site (Figure 5, 7), though the evidence for this is limited. A manor house, known to have been occupied during the 12th and 13th-centuries once existed either north or west of the church, where a later farmhouse once stood (Herbert 1988, Figure 5, 9). This former manor house is understood to have been the precursor to Matson House, which was built c.1575 (Figure 5, 2). The associated stable block at Matson House (Figure 5, 3) was added much later, in late-18th century.

- 3.18. A scheduled moat lies *c*.15m north of the Site (Figure 5, 1) and previous excavation has provided a date of the 13th-century, with the outer bank sealing Saxon remains and the inner bank sealing 12th/13th-century remains. The moated site would have included some form of dwelling, and demonstrates that dwellings existed beyond the main foci of settlement further south.
- 3.19. The focus of medieval settlement at Matson is recorded *c*.300m south-west of the Site. The distance of the Site from this focus and the presence of ridge and furrow within the Site does suggest that it likely formed part of the agricultural hinterland of Matson settlement. However, some of the features recorded in excavations to the north of the Site (Figure 4, **5a**) may still date to the 11th to 12th-centuries based on the pottery assemblage recovered. These features, some of which have been interpreted as ditches, may well be agricultural in origin (e.g. boundary and drainage ditches), but settlement cannot be entirely ruled out.

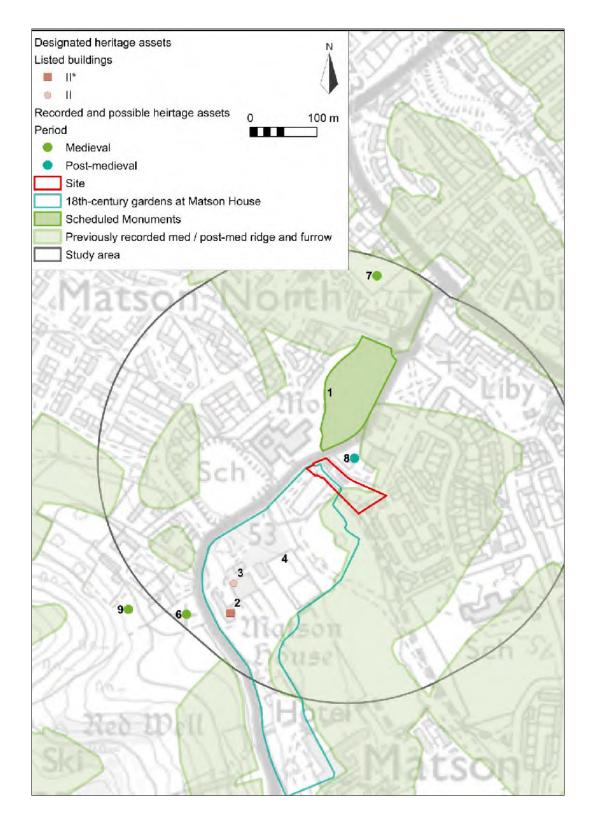


Figure 5 Known and potential medieval and post-medieval heritage assets

Mapped land use within the Site and its immediate environs

3.20. The first available mapping to depict the Site in detail is the 1799 Gloucester Inclosure map, which depicts the Site forming part of the grounds associated with Matson House, but otherwise undeveloped (Figure 6, the Site is outlined in red). The extent of the earliest known layout of the grounds associated with Matson, which comprises the 18th-century gardens, are depicted on Figure 5. The 18th-century driveway can be seen leading south from Matson House through plantation, along with a serpentine pathway.



Figure 6 An extract from the Gloucester Inclosure of 1799

3.21. As a result of the complicated historic parish boundaries, the next available map to depict the Site in detail was the tithe map of 1841 for the parish of Upton Saint Leonards (Figure 7). This map depicts School Lodge in its earliest layout, and records it under the ownership of John Robert Townshend, then Viscount Sydney and occupied by Edwin Maddy D.C.L. The new driveway associated with School Lodge is also depicted at this time cutting through The Grove, an area of plantation, occupied by a different tenant. There are additional rooms depicted extending from the north-east elevation of The Lodge at this time, which undergo a number of changes over the following years as detailed below.



Figure 7 An extract from the Upton Saint Leonards Tithe of 1841

- 3.22. The subsequent First Edition Ordnance Survey (OS) map of 1884 (Appendix 3) depicts the building with some greater detail showing that the northernmost aspect of School Lodge was likely steps or stairs, with the room to the rear probably representing an attached room perhaps a kitchen/scullery and/or a porch. The rectangular building immediately west of School Lodge, and seemingly separate from it, was either of iron or, more likely, wooden construction. This building probably served as an outbuilding or store, perhaps including an outdoor toilet.
- 3.23. The Second Edition OS map of 1902 (Appendix 3) provides further detail of the 'extensions' to the north-east facing elevation of School Lodge which include the possible kitchen, and the probable store.
- 3.24. The Third Edition OS map of 1923 shows a small infill between the former entrance and the store, possibly representing an added toilet. School Lodge remained unchanged in regards to its footprint on the revised Third Edition OS of 1938 (Appendix 3). OS mapping dating to 1956 appears to show a slightly different arrangement of extensions, to the previous maps (Appendix 3), which remain the

same on the 1962-1972 OS mapping. An OS map dating to 1978-1985 shows an additional small outbuilding on the north-east facing elevations remained extant on OS mapping dating to 1994. All the north-east facing extensions have since been demolished, and remains of a patio cover can be seen. A modern toilet has also been added to provide facilities for the adjacent angling club.

3.25. The grounds first appear in their present (albeit overgrown) layout on the OS map of 1977 to 1987, and thus date between 1962 (the date of the OS preceding map) and 1972 (see Appendix 3). Prior to this the only change depicted within the remainder of the Site is a footpath from the First Edition OS. The gardens within the Site are of no heritage value and thus do not comprise heritage assets.

School Lodge – results of the Historic Building Recording

3.26. The building survey, equivalent to a Historic England Level 2 Historic Building Recording, was undertaken by Joanne Robinson, Heritage Consultant. All main circulation rooms were recorded by photograph except for the modern kitchen extension due to poor lighting.

External (Figures 8 to 13)

- 3.27. School Lodge is built in brick, almost exclusively in Flemish bond (typical of the Victorian period) aside from the three upper sections of the chimney stack which are in stretcher bond. A damp proof course is provided by a string course of chamfered engineering brick. The simplistic style of School Lodge does include some limited stylistic details including two dormer inserts with painted timber-frame that give a very modest neo-Tudor/Arts and Crafts design quality typical of the later 19th-century, with the more vernacular styles being popular in the earlier 20th century.
- 3.28. Where visible/accessible, the windows throughout were of uPVC. The principle entrance once included a porch, a typical feature of Victorian dwellings with varying detail, which has subsequently been demolished, leaving scarring on the southwest facing elevation (Figure 8). Entrance is presently gained through a punched hole in the masonry next to the door (Figure 9).



Figure 8 The south-west facing elevation of School Lodge



Figure 9 The punched opening next to the principle entrance (south-west facing elevation)

- 3.29. The single storey kitchen extension, built off the south-east facing elevation, was constructed from sometime after 1965 according to historic mapping. The brickwork is in stretcher bond, though the chamfered damp proof course is continued and the gable end of the extension roof includes mock painted timber framing to match the original property (Figure 10).
- 3.30. A lean-to style extension to the north-east elevation, providing an outdoor toilet, is understood to have been built for the angling society who uses the pool immediately south of School Lodge (Figure 11). This elevation incorporates the chimney stack. As noted above, the remains of a former patio cover can be seen attached to this façade, with the patio remains in situ (Figure 12).



Figure 10 The south-east facing elevation



Figure 11 The north-east facing elevation



Figure12 Detail showing the patio cover and patio floor



Figure 13 The north-west facing elevation of School Lodge

Internal

3.31. The ground floor comprises of three rooms; two apparently original rooms sharing the chimney breast and a modern kitchen extension which was added sometime after 1965, based on historic OS mapping. A small cloak space is provided beneath the stairs as well as a store cupboard, next to the main entrance (Figures 14 and 15). There is no evidence of a basement.



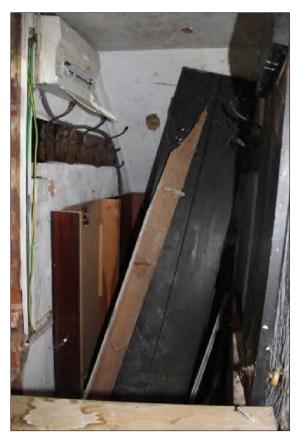


Figure 14 The current principal entrance

Figure 15 Cloak space beneath the stairs next to the principle entrance

3.32. The ground floor rooms (Figures 15 and 17) appear to both have been utilised last as reception rooms. Having two parlours is typical in such Victorian dwellings; one formal parlour and one general reception room, thus both rooms may always have served as reception rooms. Again, as is typical, all four original rooms were provided with a fireplace. The easternmost of the reception rooms includes a converted fireplace, and an external access door (Figure 16) which provided access to the possible kitchen/scullery and, most recently, a covered patio (Figures 11 and 12). The westernmost room includes an apparently unconverted fireplace in an

advanced state of decay (Figure 17). The main stairway lies in the westernmost reception room, with a banister which appears original (Figures 18 and 19)

3.33. The upstairs also comprises of three rooms; two bedrooms (Figures 20 to 23) and a bathroom (Figure 24). The upstairs fireplaces retain original brickwork and one still has an iron grate, though both are in a very poor condition (Figures 21 and 23). The bathroom is entirely modern and unremarkable in design (Figure 24) and was presumably constructed following a reorganisation of the upstairs bedroom spaces; very few lower status Victorian dwellings would have been afforded the luxury of a purpose built bathroom within the house.

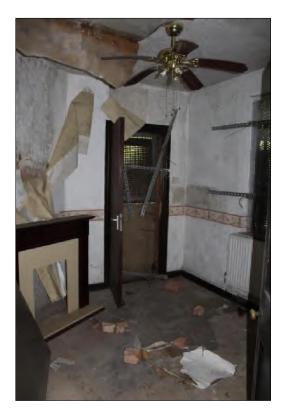


Figure 16 The Easternmost reception room



Figure 17 The westernmost reception room



Figure 18 The staircase in the westernmost reception room



Figure 19 The chamfered newel post with squared acorn newel cap

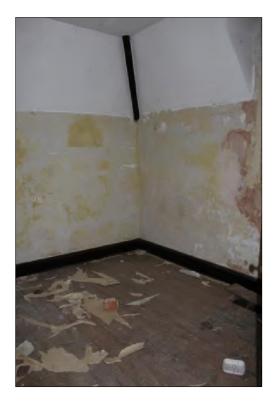


Figure 20 The bedroom adjoining the bathroom



Figure 21 The fireplace in the bedroom adjoining the bathroom



Figure 22 The larger bedroom



Figure 23 Fireplace within the larger bedroom



Figure 24 The upstairs bathroom

4. HERITAGE SIGNIFICANCE & POTENTIAL EFFECTS

Previous impacts

4.1. The main impact on ground deposits within the Site was in the Victorian period from the construction of School Lodge and its foundations; this would have impacted upon archaeological remains within its footprint, as well as beyond where modern services have been cut. Elsewhere, landscaping across the Site for various garden layouts has removed any earthworks of former ridge and furrow cultivation from within the Site.

The significance of known and potential heritage assets and archaeological remains within the Site

- 4.2. Known and potential non-designated heritage remains identified within the Site comprise:
 - School Lodge curtilage listed dwelling;
 - Potential Romano-British and Saxon settlement remains; and
 - Potential medieval remains (agricultural and settlement).

School Lodge

- 4.3. School Lodge is not included within the listing description for the Grade II* listed Matson House. The designation status of lodges not directly listed themselves but associated with principally listed houses can be complicated, as per the Historic England Advice Note 10, Listed Buildings and Curtilage (2018, p7-8). However, it is considered that School Lodge is a curtilage listed structure associated with the Grade II* listed Matson House as per the following three key criteria considered by the High Courts:
 - 'the physical layout of the listed building and structure': School Lodge lies close by Matson House and, more significantly, within the former grounds associated with it;
 - 'their ownership, both historically and at the date of listing': Matson House was designated 23 Jan 1952. School Lodge is presently under separate ownership to the house but, based on the name 'School Lodge' was almost certainly in the ownership of Selwyn School who took over the house in 1958; and

- 'the use or function of the relevant buildings, again both historically and the date of the listing': the lodge was built as an ancillary structure to Matson House and is understood to have remained in ancillary use at the time of its listing.
- 4.4. Curtilage listing, however, does not provide a measure of significance, or indeed determine that a building or structure comprises a heritage asset in and of itself. As a lodge built in the style of its time, albeit very modest, associated with an extant principal dwelling of considerable significance, School Lodge is considered to comprise a heritage asset. However, due to its limited architectural detailing and commensurate low aesthetic value; the number of alterations since its first construction; and its severance from Matson House (best demonstrated through the loss of the former driveway which was associated and contemporary with the lodge), it is considered to comprise a heritage asset of limited heritage significance.

Potential Romano-British remains

4.5. The Site has some potential for Romano-British settlement remains. Such remains would be of evidential and historic (illustrative) value, contributing towards our understanding of local settlement beyond the *colonia* at Gloucester. Such remains would thus comprise heritage assets of some heritage significance on the basis of these values. However, such remains would not be anticipated to be of such significance that they would preclude the development of the Site.

Potential Saxon remains

4.6. There is some evidence for Saxon remains in the area, including remains of a trackway recorded north-east of the Site, and possible remains of associated activity or settlement, as represented by a hearth, to the west of the Site. Though such remains are highly rare, the Site is considered to have some potential for Saxon remains based on the presence of these proximate features. Such remains would be of evidential and historic (illustrative) value, enhancing our understanding of the nature and extent of the pre-medieval settlement of Matson, and the region more widely. Such remains would therefore comprise heritage assets of some heritage significance on the basis of these values. However, based on the fragmentary nature of those features recorded within the Site environs, such remains would not be anticipated to be of such significance that they would preclude the development of the Site.

Buried remains of medieval / post-medieval ridge and furrow

4.7. The Site is known to have contained earthworks resulting from medieval / postmedieval ridge and furrow cultivation. No above ground remains of these features survive within the Site. Any below ground remains, e.g. buried and infilled ditches, of such known earthworks would not be of sufficient value to comprise heritage assets.

Potential physical development effects

- 4.8. The proposed development will result in the restoration of the curtilage listed School Lodge. The scheme of restoration is sensitive to the external historic character of School Lodge, and will retain and restore its key original features, without major alteration. The proposed development includes for the reorganisation of the internal spaces of School Lodge. The ground floor rooms are to be revised to provide a single open plan community use. The first floor will be somewhat reorganised with conversion to a main store/office, and a separate WC. In its present layout, School Lodge retains original Victorian elements including a double parlour arrangement on the ground floor, and separate rooms all provided with a fireplace off the central stack. These original Victorian elements make a positive contribution towards the significance and character of School Lodge. The proposed development would thus result in a change to the character of School Lodge through the reorganisation of its internal spaces. Proposals which result in changes to the character of a listed building require Listed Building Consent.
- 4.9. No designated archaeological remains are within the Site, and no remains of commensurate value are anticipated. As such, no designated archaeological remains or remains of commensurate value will be affected by the proposed development.
- 4.10. Similarly, there are no known non-designated archaeological remains within the Site. As set out above, there is some potential for currently unrecorded remains, which would be affected, if present, by below-ground development works. Below ground development works include the excavation of foundations for the proposed apartment block, and any associated service trenches, but also include ground reduction associated with the proposed parking and associated landscaping There is no evidence that any such remains would be of a level of significance that would preclude development.

5. THE SETTING OF HERITAGE ASSETS

5.1. This section considers potential non-physical effects upon the significance of susceptible heritage assets within the Site environs. Non-physical effects are those that derive from changes to the setting of heritage assets as a result of new development. Those assets identified as potentially susceptible to non-physical impact, and thus subject to more detailed assessment, are discussed in greater detail within the remainder of this section. All heritage assets discussed in detail are summarised in the gazetteer in Appendix 2, and shown on Figure 25.

Step 1: Identification of heritage assets potentially affected

- 5.2. Step 1 of the Second Edition of Historic England's 2017 'Good Practice Advice in Planning: Note 3' (GPA3) is to 'identify which heritage assets and their settings are affected' (see Appendix 1). GPA3 notes that Step 1 should identify the heritage assets which are likely to be affected as a result of any change to their experience, as a result of the development proposal (GPA3, page 9).
- 5.3. Three heritage assets were identified as being potentially susceptible to harm through non-physical impacts as a result of the proposed development. These assets consist of:
 - Matson Moated Site (Scheduled Monument, Figure 25, 1);
 - Matson House and attached wall (Grade II* listed, Figure 25, 2), and its associated historic grounds; and
 - the associated Former Stable Block (Grade II listed, Figure 25, 3).
- 5.4. The Site visit, and study area walkover, identified that there would be no nonphysical impact upon the significance of any other heritage assets as a result of changes to the use and/or appearance of the Site.

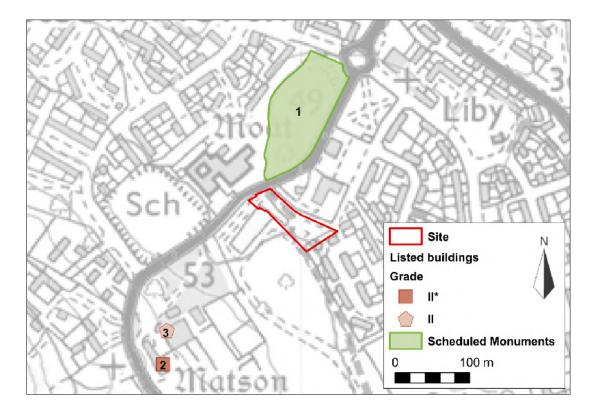


Figure 25 The setting of heritage assets

5.5. During the Site visit, it was quickly established that the Site, despite its proximity, does not form part of the setting of Matson Moated Site (Fig. 25, 1) which contributes towards its experience. As per the GPA3 settings guidance (2017), scheduled monuments (which include below ground remains) are acknowledged as having a setting. Whilst the Site is considered to have some potential for medieval deposits, such deposits would provide context for Matson Moated Site, but would not form part of the surroundings in which it is experienced. With regards to views, the Site occupies a very discrete location in relation to Matson Moated Site (Figure 26) such that changes to its appearance would not change the current experience of this asset. As such, the Site does not have the capacity to influence the significance of Matson Moated Site and is not considered to form part of its setting.

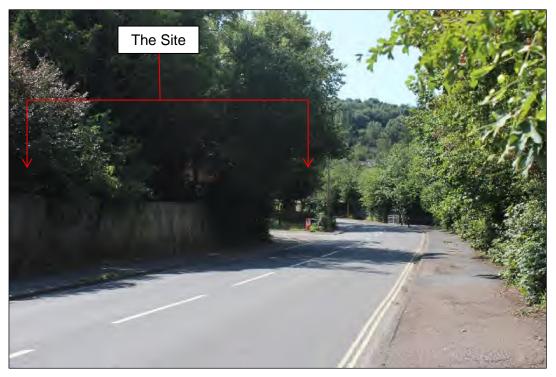


Figure 26 View next to the scheduled monument from Matson Lane towards the Site.

Steps 2 – 3: Assessment of setting and potential effects of the development

5.6. This section presents the results of Steps 2 to 3 of the settings assessment, which have been undertaken with regard to those potentially susceptible heritage assets identified in Step 1. Step 2 considers the contribution that setting makes to the significance of potentially susceptible heritage assets. Step 3 then considers how, if at all, and to what extent any anticipated changes to the setting of those assets, as a result of development within the Site, might affect their significance.

Matson House and attached wall (Grade II* listed) and the associated Former Stable Block (Grade II listed)

- 5.7. The following section discusses the setting of the listed buildings at Matson House, and also its grounds, which contribute to the significance of those listed buildings.
- 5.8. Matson House is a former manor house built in *c*.1575, now utilised as a residential home. Matson House is constructed from stone, later coated with roughcast, with dressed stone details. Matson House has late 18th-century and 19th-century additions in brick. The roofs are gabled stone with brick stacks some with diagonal shafts. The former manor house was built for Richard Pates, MP for Gloucester who later founded Pates Grammar School as well as George Augustus Selwyn, MP for Gloucester. In 1643 the house was requisitioned for lodgings for King Charles I and his sons Charles and James, and became the Royalist

headquarters during the Siege of Gloucester. In 1788, King George III, Queen Charlotte, the Princess Royal and Princesses Augusta and Elizabeth stayed at Matson House whilst visiting Cheltenham.

- 5.9. Matson House draws significance primarily from the evidential and historic (illustrative) value embodied within its fabric as an example of a later 16th-century dwelling, with later additions and 'improvements'. Matson House also draws significance from the aesthetic value of its architecture. Matson House draws historic (associative) value from its association with a number of important historic persons, including royalty and local politicians, and was used during the first English Civil War. Due to the quality of its architecture and the condition in which it survives, Matson House is also considered to derive significance from its aesthetic value.
- 5.10. The Former Stable Block is of late 18th-century date, built for George Augustus Selwyn and latterly used as a school building within the grounds of Selwyn School. The former stables are constructed from dressed stone in courses and brick, with a gabled tile and stone slate roof with brick stack. The block is 'L' shaped in plan, with the east range formerly comprising the stables and the north range formerly comprising two cottages for servants.

Physical Surrounds – 'What Matters and Why'

- 5.11. The setting of the Former Stable Block is considered holistically with the broad setting of Matson House due to their intrinsic relationship with one another, thus the former stable is not always referenced directly.
- 5.12. As an Elizabethan house, Matson House would certainly have had associated formal gardens, but no trace of any Elizabethan garden survives above ground. Such gardens likely comprised of walled compartments around the house with gravel paths, knots, topiary and hedges, later influenced by the Italian Renaissance and terraces, obelisks and fountains were introduced (Historic England, 2018). Water gardens were another key garden feature during the later 16th and early 17th centuries, and from the Restoration (1660) gardens were laid out to reflect contemporary continental styles which included formal pools and canals as well as fountains and statuary, laid out in compartments divided by tall walls with gates and screens. The surviving remnants of formal gardens which extend from the rear of the property, which include walled compartments and a canal, are understood to be of 18th-century date (Herbert, 1988) and are therefore contemporary with the

construction of the Former Stable Block. The wider landscape of the original Matson House would likely have included parkland and the wider estate, accessed via avenues and carriage rides. Many houses of the later 16th century would have been associated with deer parks; Queen Elizabeth was a keen hunter and her courtiers often established hunting parks for her entertainment (*ibid*). From the mid-16th century imparkment of land was undertaken to provide deer parks as well as to provide residents with a sense of privacy and to give the houses a pleasing setting. Little is known of such early gardens or the extent of any associated parkland at Matson House, and no evidence for the pre-18th-century grounds survives above ground. As such, no landscaping features contemporary with the construction of Matson House survive to form part of its setting.

- 5.13. As noted above, surviving elements of former gardens include remains of extensive 18th to 19th-century landscaping. These include the aforementioned canal, terraces and the walled garden. These features form part of a designed landscape established to complement the house and reflecting recognised design ideals of their time, established most likely by George Augustus Selwyn. As such, these features are considered to form part of the setting of Matson House and its associated Former Stable Block which make a positive contribution towards their significance adding to their historic (illustrative and associative) and aesthetic values. Some of the tree planting to the south of Matson House may represent fragmentary remains of dense plantation which was mapped extending immediately south of Matson House on the 1799 Inclosure map. The principle drive, at the end of the 18th-century, and a serpentine ride approached the house through this plantation. Neither the drive nor the ride survives. However, the mature planting to the south of Matson House, as viewed from Matson Lane, is considered to form part of the setting of Matson House which makes a positive contribution towards its significance, affording some legibility of its former 'parkland' landscape despite modern encroachment, thus positively contributing to its historic and aesthetic values.
- 5.14. In the early/mid-19th-century (by 1841) the principle drive to Matson House was moved to run from the house to the north, where it accessed Matson Lane. This principal entrance was marked by a lodge, now School Lodge, and gate piers. The driveway has since been relocated further south and only one gate pier remains standing on the eastern side of the former drive. The western gate pier has been

demolished, though the remains of the pier are still present and could be re-erected. As observed above, School Lodge, the former lodge established as part of the Victorian 'improvements' at Matson House, survives in very poor condition. On this basis, combined with the loss of the drive and the condition of the gate piers, these aspects of the last phase of improvements undertaken at Matson House are considered to make only a small positive contribution towards its significance, enhancing its historic (illustrative) values and demonstrating landscaping related ideals of the time. 19th-century Ordnance Survey maps indicate that land on the western side of Matson Lane, adjacent to Matson House, were brought into the designed landscape of the house, utilising a tree lined avenue and specimen planting. This area of land is now utilised as a golf course, and the former landscaping features, such as the tree lined avenue, have been removed. This aspect of the setting of Matson House is thus considered to have a neutral effect on its significance.

Experience – 'What Matters and Why'

- 5.15. Matson House is best experienced from Matson Lane, looking towards the principle, south-west facing elevation. From here, the aesthetic value of its architecture is best appreciated, with clear views afforded by the low walls and sparse mature planting.
- 5.16. As previously noted, the last formal driveway met Matson Lane further north of the existing driveway and was accessed via a gated entrance with decorative gate piers and a flanking lodge. This driveway has since been moved to the present driveway position further south, and both the former lodge and gate piers are in a state of disrepair. However, School Lodge is otherwise experienced much as it would have been when constructed, as an isolated lodge surrounded by mature plantation (Figure 27) There are no views of Matson House from the former gated entrance, though it is acknowledged that historically there wouldn't have been views of the house from this drive as it approached Matson House through plantation known as The Grove. In summary, the loss of the associated driveway and the current condition of the former gate result in School Lodge making a very limited contribution towards the experience of Matson House.
- 5.17. The present driveway, which approaches from Matson Lane to the north of Matson House, takes in very modern additions to the rear of Matson House associated with its use as a school. These buildings destroyed the walled garden area closest to the

house and are considered to have a negative effect on the significance of both Matson House and the associated Former Stable Block.



Figure 27 View from School Lodge towards Matson House (Figure 25, 2)

Summary of development effects

- 5.18. The Site includes the curtilage listed School Lodge, a Victorian lodge which forms part of the later, 19th-century redesign of the landscape associated with the Grade II* listed Matson House. School Lodge survives in a state of disrepair and, in this present condition, makes only a very limited contribution towards the significance of Matson House as part of its setting. The proposed development includes for the sensitive restoration of the external elevations of School Lodge makes towards the significance of Matson House the contribution which School Lodge makes towards the significance of Matson House enhancing the legibility of the last phase of improvements within its grounds, such that School Lodge would make a greater positive contribution towards its significance, enhancing its historic (illustrative) and aesthetic values.
- 5.19. The proposals include for the construction of a two storey apartment block to the east of School Lodge (i.e. within its 'garden'). The proposed new block is of a simple modern design but positively references the gabled forms of the lodge and of Matson House. The contemporary materials palette is restrained, and again

references the materiality of the lodge with the predominant building material being red brick. The proposed new block will be visible in key views of School Lodge from Matson Lane and would detract from the present experience of these views, which currently allow for at least some interpretation of the lodge as an isolated historic entrance marker to the main estate.

5.20. As such, this aspect of the proposed development would have a negative impact on the significance of Matson House through alteration of its setting. However, the proposed development will not alter any key views of Matson House, nor would it be anticipated to form a significant change in any designed views from Matson House, particularly considering the level of change in its immediate gardens and wider 18th and 19th-century grounds. As such, the level of harm resulting from the construction of the proposed two storey apartment block would be less than substantial and at the lower end of less than substantial.

6. CONCLUSIONS

6.1. This assessment has included a review of a comprehensive range of available sources, in accordance with key industry guidance, in order to identify known and potential heritage assets located within the Site and its environs which may be affected by the proposals. The significance of the identified known and potential heritage assets has been determined, as far as possible, on the basis of available evidence. The potential effects of the proposals on the significance of identified heritage assets, including any potential physical effects upon buried archaeological remains, and potential non-physical effects resulting from the anticipated changes to the settings of heritage assets, have been assessed. Any physical or non-physical effects of the proposals upon the significance of the heritage resource will be a material consideration in the determination of the planning application for the proposal.

Physical effects

School Lodge

6.2. The Site includes School Lodge, a 19th-century lodge which forms part of the curtilage of the Grade II* listed Matson House. School Lodge is currently in a state of disrepair and is at high risk of further decay without renovation works, particularly in relation to water ingress. The proposed development includes for the retention of School Lodge and for its repair and renovation to provide a community use and café. The proposed scheme of repair and restoration to its external elevations would result in a heritage benefit to its significance. However, the proposed scheme also includes change to the internal arrangement of School Lodge, which would somewhat change its character. Changes to the character of a listed building (including curtilage listed structures) require Listed Building Consent.

Archaeology

6.3. The Site has some potential for Romano-British and Saxon activity / settlement remains. Such remains would comprise heritage assets of evidential and historic (illustrative) value, but are not anticipated to be of sufficient heritage value preclude the development of the Site. Implementation of a programme of appropriate and proportionate archaeological mitigation would mitigate the harm occasioned to such assets as a result of the proposed development.

Non-physical effects

6.4. A full settings assessment has been undertaken. This assessment has established that the proposed scheme of external restoration works to School Lodge will result in a small heritage benefit to the overall significance of the Grade II* listed Matson House as a result of positive changes to its setting. However, the proposed construction of a two-storey apartment block would result in a small degree of harm to its significance. The level of harm would be less than substantial, and at the lower end of less than substantial. The NPPF (para 202) states 'where a development proposal will leave to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use'.

7. **REFERENCES**

- British Geological Survey 2019 Geology of Britain Viewer, 1:50,000 geological mapping, bedrock and superficial - <u>http://mapapps.bgs.ac.uk/geologyofbritain 3d/index.html</u>
- Chartered Institute for Archaeologists 2017 Standard and Guidance for Historic Environment Desk-Based Assessment
- Garrod, A. P. 1985 *Review of Archaeology in Gloucestershire for 198* (unpublished document)
- Garrod, A. P. 1996 Housing Development off Rectory Road, Matson, Gloucester (unpublished document)
- Garrod, A. P. 1998 Selwyn School Formerly Matson Manor, Taylor House, Matson Lane, Gloucester: Archaeological Note (unpublished document)
- Gloucester City Council 2008 Development Affecting Sites of Historic Environment (Archaeological) Interest. Interim Adoption Supplementary Planning Document [Online] available at <u>https://www.gloucester.gov.uk/media/2004/dashe-ia-0808.pdf</u> [Accessed August 2019]
- Gloucester City Council, Cheltenham Council and Tewkesbury Borough Council., 2017 *Joint Core Strategy 2011-2031* [Online] available at <u>https://www.jointcorestrategy.org/home</u> [Accessed August 2019]
- Historic England 2008 Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment
- Historic England 2015 Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment
- Historic England 2016 Understanding Historic Buildings, a Guide to Good Recording Practice [Online] available at <u>https://historicengland.org.uk/images-books/publications/understanding-historic-buildings/heag099-understanding-historic-buildings/</u> <u>buildings/</u> [Accessed August 2019]
- Historic England 2017 Historic Environment Good Practice Advice in Planning: Note 3: The Setting of Heritage Assets (Second Edition)
- Historic England 2018 Advice Note 10, Listed Buildings and Curtilage [Online] available at https://historicengland.org.uk/images-books/publications/listed-buildings-and-curtilageadvice-note-10/ [Accessed August 2019]

- Historic England 2018 *Gardens: Scheduling Selection Guide* [Online] available at <u>https://historicengland.org.uk/images-books/publications/dssg-gardens/heag244-gardens-ssg/ [Accessed August 2019]</u>
- Herbert, N. M. ed, *Matson*, in A Historic of the County of Gloucester: Volume 4, the City of Gloucester. Pp.438-448 [Online] available at <u>https://www.britishhistory.ac.uk/vch/glos/vol4/pp438-448</u> [Accessed August 2019]
- Ministry of Housing, Communities and Local Government 2021 National Planning Policy Framework [Online] available at <u>https://www.gov.uk/government/publications/national-planning-policy-framework--2</u> [Accessed August 2019]

Planning (Listed Buildings and Conservation Areas) Act 1990 Act of UK Parliament

Cartographic sources (held by Gloucestershire Archives and viewed using the Know Your Place website)

1799 Gloucester Inclosure map

1841 Upton Saint Leonards Tithe map

Ordnance Survey maps viewed at: <u>http://www.envirocheck.co.uk/</u> and <u>www.maps.nls.uk/geo/find/</u>

APPENDIX 1: HERITAGE STATUTE POLICY & GUIDANCE

Heritage Statute: Scheduled Monuments

Scheduled Monuments are subject to the provisions of the Ancient Monuments and Archaeological Areas Act 1979. The Act sets out the controls of works affecting Scheduled Monuments and other related matters. Contrary to the requirements of the Planning Act 1990 regarding Listed buildings, the 1979 Act does not include provision for the 'setting' of Scheduled Monuments.

Heritage Statute: Listed Buildings

Listed buildings are buildings of 'special architectural or historic interest' and are subject to the provisions of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act'). Under Section 7 of the Act 'no person shall execute or cause to be executed any works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest, unless the works are authorised.' Such works are authorised under Listed Building Consent. Under <u>Section 66</u> of the Act 'In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any feature of special architectural or historic interest which it possesses'.

Note on the extent of a Listed Building

Under Section 1(5) of the Act, a structure may be deemed part of a Listed Building if it is:

- (a) fixed to the building, or
- (b) within the curtilage of the building, which, although not fixed to the building, forms part of the land and has done so since before 1st July 1948

The inclusion of a structure deemed to be within the 'curtilage' of a building thus means that it is subject to the same statutory controls as the principal Listed Building. Inclusion within this duty is not, however, an automatic indicator of 'heritage significance' both as defined within the NPPF (2019) and within Conservation Principles (see Section 2 above). In such cases, the significance of the structure needs to be assessed both in its own right and in the contribution it makes to the significance and character of the principal Listed Building. The practical effect of the inclusion in the listing of ancillary structures is limited by the requirement that Listed Building Consent is only needed for works to the 'Listed Building' (to include the building in the list and all the ancillary items) where they affect the special character of the Listed building as a whole.

Guidance is provided by Historic England on 'Listed Buildings and Curtilage: Historic England Advice Note 10' (Historic England 2018).

Heritage Statue: Conservation Areas

Conservation Areas are designated by the local planning authority under Section 69(1)(a) of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act'), which requires that 'Every local planning authority shall from time to time determine which parts of their area are areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance'. Section 72 of the Act requires that 'special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area'.

The requirements of the Act only apply to land within a Conservation Area; not to land outside it. This has been clarified in various Appeal Decisions (for example APP/F1610/A/14/2213318 Land south of Cirencester Road, Fairford, Paragraph 65: '*The Section 72 duty only applies to buildings or land in a Conservation Area, and so does not apply in this case as the site lies outside the Conservation Area.*').

The NPPF (2021) also clarifies in <u>Paragraph 207</u> that 'Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance'. Thus land or buildings may be a part of a Conservation Area, but may not necessarily be of architectural or historical significance. Similarly, not all elements of the setting of a Conservation Area will necessarily contribute to its significance, or to an equal degree.

National heritage policy: the National Planning Policy Framework Heritage assets and heritage significance

Heritage assets comprise 'a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest' (the NPPF (2021), Annex 2). Designated heritage assets include World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields and Conservation Areas (designated under the relevant legislation; NPPF (2021), Annex 2). The NPPF (2021), Annex 2, states that the significance of a heritage asset may be archaeological, architectural, artistic or historic. Historic England's 'Conservation Principles' looks at significance as a series of 'values' which include 'evidential'. 'historical', 'aesthetic' and 'communal'.

The setting of heritage assets

The 'setting' of a heritage asset comprises 'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral' (NPPF (2021), Annex 2). Thus it is important to note that 'setting' is not a heritage asset: it may contribute to the value of a heritage asset.

Guidance on assessing the effects of change upon the setting and significance of heritage assets is provided in 'Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets', which has been utilised for the present assessment (see below).

Levels of information to support planning applications

<u>Paragraph 194</u> of the NPPF (2021) identifies that 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance'.

Designated heritage assets

<u>Paragraph 189</u> of the NPPF (2021) explains that heritage assets 'are an irreplaceable resource and should be conserved in a manner appropriate to their significance'. <u>Paragraph 199</u> notes that 'when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance'. <u>Paragraph 200</u> goes on to note that 'substantial harm to or loss of a grade II listed building...should be exceptional and substantial harm to or loss of designated heritage assets of the highest significance (notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites)...should be wholly exceptional'.

<u>Paragraph 202</u> clarifies that 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate, securing its optimum viable use'.

Joint Core Strategy

Policy SD8: Historic Environment [only relevant sections are reproduced]

- 1. The built, natural and cultural heritage of Gloucester City [...] smaller historic settlements and the wider countryside will continue to be valued and promoted for their important contribution to local identity, quality of life and the economy.
- Development should make a positive contribution to local character and distinctiveness, having regard to valued and distinctive elements of the historic environment;
- 3. Designated and undesignated heritage assets and their settings will be conserved and enhanced as appropriate to their significance, and for their contribution to local character, distinctiveness and sense of place. Consideration will also be given to the contribution made by heritage assets to supporting sustainable communities and the local economy. Development should aim to sustain and enhance the significance of heritage assets and put them to viable uses consistent with their conservation whilst improving accessibility where appropriate;
- 4. Proposals that will secure the future conservation and maintenance of heritage assets and their settings that are at risk through neglect, decay or threats will be encouraged. Proposals that will being vacant or derelict heritage assets back into appropriate use will also be encouraged;

Good Practice Advice 1-3

Historic England has issued three Good Practice Advice notes ('GPA1-3') which support the NPPF. The GPAs note that they do not constitute a statement of Government policy, nor do they seek to prescribe a single methodology: their purpose is to assist local authorities, planners, heritage consultants, and other stakeholders in the implementation of policy set out in the NPPF. This report has been produced in the context of this advice, particularly 'GPA2 – Managing Significance in Decision-Taking in the Historic Environment' and 'GPA3 – The Setting of Heritage Assets'.

GPA2 - Managing Significance in Decision-Taking in the Historic Environment

GPA2 sets out the requirement for assessing 'heritage significance' as part of the application process. Paragraph 8 notes 'understanding the nature of the significance is important to understanding the need for and best means of conservation.' This includes assessing the extent and level of significance, including the contribution made by its 'setting' (see GPA3)

below). GPA2 notes that 'a desk-based assessment will determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area, and the impact of the proposed development on the significance of the historic environment, or will identify the need for further evaluation to do so' (Page 3).

GPA3 – The Setting of Heritage Assets

The NPPF (Annex 2: Glossary) defines the setting of a heritage asset as 'the surroundings in which a heritage asset is experienced...'. Step 1 of the settings assessment requires heritage assets which may be affected by development to be identified. Historic England notes that for the purposes of Step 1 this process will comprise heritage assets 'where that experience is capable of being affected by a proposed development (in any way)...'.

Step 2 of the settings process 'assess[es] the degree to which these settings and views make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated', with regard to its physical surrounds; relationship with its surroundings and patterns of use; experiential effects such as noises or smells; and the way views allow the significance of the asset to be appreciated. Step 3 requires 'assessing the effect of the proposed development on the significance of the asset(s)' – specifically to 'assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it', with regard to the location and siting of the development, its form and appearance, its permanence, and wider effects.

Step 4 of GPA3 provides commentary on 'ways to maximise enhancement and avoid or minimise harm'. It notes (Paragraph 37) that 'Maximum advantage can be secured if any effects on the significance of a heritage asset arising from development liable to affect its setting are considered from the project's inception.' It goes on to note (Paragraph 39) that 'good design may reduce or remove the harm, or provide enhancement'.

Heritage significance

Discussion of heritage significance within this assessment report makes reference to several key documents. With regard to Listed buildings and Conservation Areas it primarily discusses 'architectural and historic interest', which comprises the special interest for which they are designated.

The NPPF provides a definition of 'significance' for heritage policy (Annex 2). This states that heritage significance comprises 'The value of a heritage asset to this and future generations because of its heritage interest. That interest may be <u>archaeological</u>, <u>architectural</u>, <u>artistic</u> or

<u>historic</u>'. This also clarifies that for World Heritage Sites 'the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance'.

Regarding 'levels' of significance the NPPF (2021) provides a distinction between: designated heritage assets of the highest significance; designated heritage assets not of the highest significance; and non-designated heritage assets.

Historic England's 'Conservation Principles' expresses 'heritage significance' as comprising a combination of one or more of: evidential value; historical value; aesthetic value; and communal value:

- Evidential value the elements of a historic asset that can provide evidence about past human activity, including physical remains, historic fabric, documentary/pictorial records. This evidence can provide information on the origin of the asset, what it was used for, and how it changed over time.
- Historical value (illustrative) how a historic asset may illustrate its past life, including changing uses of the asset over time.
- Historical value (associative) how a historic asset may be associated with a notable family, person, event, or moment, including changing uses of the asset over time.
- Aesthetic value the way in which people draw sensory and intellectual stimulation from a historic asset. This may include its form, external appearance, and its setting, and may change over time.
- Communal value the meaning of a historic asset to the people who relate to it. This
 may be a collective experience, or a memory, and can be commemorative or symbolic to
 individuals or groups, such as memorable events, attitudes, and periods of history. This
 includes social values, which relates to the role of the historic asset as a place of social
 interactive, distinctiveness, coherence, economic, or spiritual / religious value.

Effects upon heritage assets

Heritage benefit

The NPPF clarifies that change in the setting of heritage assets may lead to heritage benefit. Paragraph 206 of the NPPF (2021) notes that 'Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably'. GPA3 notes that 'good design may reduce or remove the harm, or provide enhancement' (Paragraph 28). Historic England's 'Conservation Principles' states that 'Change to a significant place is inevitable, if only as a result of the passage of time, but can be neutral or beneficial in its effects on heritage values. It is only harmful if (and to the extent that) significance is reduced' (Paragraph 84).

Specific heritage benefits may be presented through activities such as repair or restoration, as set out in Conservation Principles.

Heritage harm to designated heritage assets

The NPPF (2021) does not define what constitutes 'substantial harm'. The High Court of Justice does provide a definition of this level of harm, as set out by Mr Justice Jay in *Bedford Borough Council v SoS for CLG and Nuon UK Ltd.* Paragraph 25 clarifies that, with regard to 'substantial harm': 'Plainly in the context of physical harm, this would apply in the case of demolition or destruction, being a case of total loss. It would also apply to a case of serious damage to the structure of the building. In the context of non-physical or indirect harm, the yardstick was effectively the same. One was looking for an impact which would have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced'.

Effects upon non-designated heritage assets

The NPPF (2021) <u>paragraph 203</u> guides that 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset'.

APPENDIX 2: GAZETTEER OF SELECTED RECORDED HERITAGE ASSETS

Report Ref	Description	Grade/Period	NGR	HE ref. HER ref. HEA ref.
1	Matson moated site. A trench was excavated across the north-west side of the ditch and dated it to the 13th- century, with the outer bank sealing Saxon remains while the inner bank sealed 12th/13th-century remains. An evaluation at the school immediately west of the moated site recorded abraded pottery likely associated with the scheduled monument.	Scheduled monument	384999 215848	1016870 50206 <i>115197</i> 21486 10199
2	Matson House and attached wall Includes the Grade II listed boundary wall on street frontage to south-west and south of Matson House.	Grade II* listed Grade II listed	384808 215468	1245730 1245731 41900 <i>115300</i> <i>1479226</i>
3	Former stable block to north- east of Matson House	Grade II listed	384820 223156	1245732
4	Matson House park including the remains of an 18th- century walled garden.	Post-medieval / modern	Centred on 384877 215572	1479226
5a	A watching brief in 1985 observing foundation trenches up to 1.2m in depth. Roman, Saxon and medieval material was recorded.	Romano-British and Saxon		10198
5b	A watching brief Romano- British farmstead, superseded by a villa site and evidence for an early medieval trackway. The initial evaluation (10197) had not identified any archaeological deposits.	Romano-British and Saxon	385041 215698	853 10196 10197
6	St Katherine's Church and possible medieval graveyard. The church itself was rebuilt between the years 1739 and 1893 and no significant medieval architecture survives.	Medieval / Modern	384750 215460	8368 815 814

Report Ref	Description	Grade/Period	NGR	HE ref. HER ref. <i>HEA ref.</i>
7	Possible site of a medieval chapel In 1993 a geophysical survey was undertaken which identified some limited archaeological potential. Subsequent evaluation (also in 1993) recorded only modern deposits. Subsequent watching brief in 1997 found	Medieval?	385040 215990	4828 10003 10238
N/A	Medieval to post-medieval ridge and furrow seen as earthworks on aerial photographs and mapped by the HER. Geophysical survey c.190m south-west of the Site and subsequent evaluation recorded the ridge and furrow but no other features or finds.	Medieval/Post- medieval	N/A	50559 980 981 <i>1582647</i>
8	In c.1878 a small collection of Roman pottery was found during the construction of the rectory; an earthwork interpreted as a trench of possible moat was also recorded later interpreted as a Civil War earthwork.	Post-medieval (residual Romano- British)	385079 215726	4819 <i>115200</i>
9	Conjectured location of Matson manor house and former medieval church.	Medieval	c.385461 215467	N/A
	A probably post-medieval enclosure and trackways mapped by the Severn Vale NMP project.	Post-medieval	484740 215688	1582649

APPENDIX 3: HISTORIC ORDNANCE SURVEY MAPPING

Historical Mapping Legends

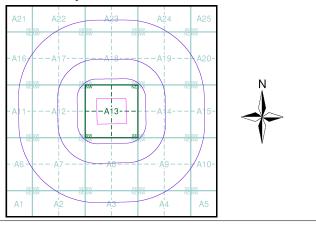
Ordnance Survey County Series 1:10,560			C	Ordnance Survey Plan 1:10,000			1:10,000 Raster Mapping			
Grav Pit	vel Sand Pit	Multiment Other Multiment Pits	Contraction of the second	∽ Chalk Pit, Clay Pit ゲ or Quarry		se Gravel Pit		Gravel Pit		Refuse tip or slag heap
🕐 Quar	ry Shingle	•••••• ••••••• ••••••		Sand Pit	, 	 Disused Pit or Quarry 		Rock		Rock (scattered)
پ [*] ، [*] ، [*] ، [*] ، [*] ، [*] , , [*] , , [*] , , [*]	rs	Marsh		∧ Refuse or ∛ Slag Heap		Lake, Loch or Pond		Boulders	0 0 0	Boulders (scattered)
4 2 5 c 4 6 6 9 4 5	(4) (4) (4) (4) (4) (4) (4) (4)	207 209 207 207 207 209 209 499		. Dunes	° ° ° ° °	Boulders		Shingle	Mud	Mud
Mixed Wood	d Deciduous	Brushwood	* * *	Coniferous Trees	۵. ۵.	, Non-Coniferous , Trees	Sand	Sand		Sand Pit
			 	Orchard በი_	Scrub	۲ ۱ ، Coppice	1111111	Slopes	المليليليليليليا	Top of cliff Underground
Fir	Furze	Rough Pasture	ាំា	Bracken MIIII	Heath	、、,,,,Rough Grassland		General detail - O∨erhead detail		detail Narrow gauge railway
	row denotes م w of water	Trigonometrical Station	_ <u></u>	Marsh 、、、Y//,	Reeds	<u>→_ა</u> Saltings		Multi-track railway		Single track railway
	te of Antiquities 🔹 🛧	Bench Mark		Dire Building	ction of Flow of	f Water	_•_•	County boundary (England only)	••••	Ci∨il, parish or community boundary
• Sig	ımp, Guide Post, gnal Post urface Level	Well, Spring, Boundary Post	888	Glasshouse		Sand		District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
Sketched	Instrun Conto	200		Sloping Masonry	Pylon — — 🗆 — Pole	 Electricity Transmission Line 	۵ ^۵ **	Area of wooded vegetation Non-coniferous	۵۵ ۵۵	Non-coniferous trees Coniferous
Main Roads	Fenced Minor	Roads Un-Fenced	Cutting	Embankn	•	— Standard Gauge	Ω 	trees (scattered) Coniferous	** **	trees Positioned
Martin Martin Caracteria	Sunken Road	Raised Road		······	·····	'' Multiple Track ⊣⊨ Standard Gauge	* 4 4	trees (scattered) Orchard	K K	tree
san national filling	Road over Railway	Railway over River	Under	Over Cros	sing Bridg	e Siding, Tramway or Mineral Line → Narrow Gauge	் க வர், வர்,	Rough Grassland	assilta	or Osiers Heath
A CONTRACT OF CONTRACT.	Railway over Road	Level Crossing		Geographical C	ounty		00_ 00_	Scrub	ג <u>יע</u> ור אעור	Marsh, Salt Marsh or Reed
	Road over River or Canal	Road over		Administrative C or County of Cit Municipal Borou	У	_		Water feature	<i>←</i> <i>←</i>	Flow arrows
	Road o∨er Stream			Burgh or Distric Borough, Burgh	or County Co		MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs)
	County Boundary (Geogr County & Ci∨il Parish Bo	. ,		Civil Parish Shown alternately	when coincidence	of boundaries occurs	+-	Telephone line (where shown)	-••-	Electricity transmission li (with poles)
+ ·+·+·+	Administrative County &	-	BP, BS Ch	Boundary Post or Stone Church	Pol Sta PO	Police Station Post Office	← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
Co. Boro. Bdy.	County Borough Boundar		CH F E Sta FB	Club House Fire Engine Station Foot Bridge –	PC PH SB	Public Convenience Public House Signal Box		Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare sta or lighting tow
Co. Burgh Bdy.		· · · · · · · · · /	Fn GP	Fountain Guide Post	Spr TCB	Spring Telephone Call Box	•‡•	Site of (antiquity)		Glasshouse
⊻	Rural District Boundary		MP	Mile Post	TCP	Telephone Call Post				Important

Envirocheck[®] LANDMARK INFORMATION GROUP[®]

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Gloucestershire	1:10,560	1884	2
Gloucestershire	1:10,560	1903	3
Gloucestershire	1:10,560	1924	4
Gloucestershire	1:10,560	1938	5
Ordnance Survey Plan	1:10,000	1954 - 1955	6
Ordnance Survey Plan	1:10,000	1954	7
Ordnance Survey Plan	1:10,000	1960 - 1968	8
Ordnance Survey Plan	1:10,000	1971 - 1974	9
Ordnance Survey Plan	1:10,000	1975	10
Ordnance Survey Plan	1:10,000	1988	11
Ordnance Survey Plan	1:10,000	1990	12
Ordnance Survey Plan	1:10,000	1994	13
10K Raster Mapping	1:10,000	2000	14
Street View	Variable		15

Historical Map - Slice A



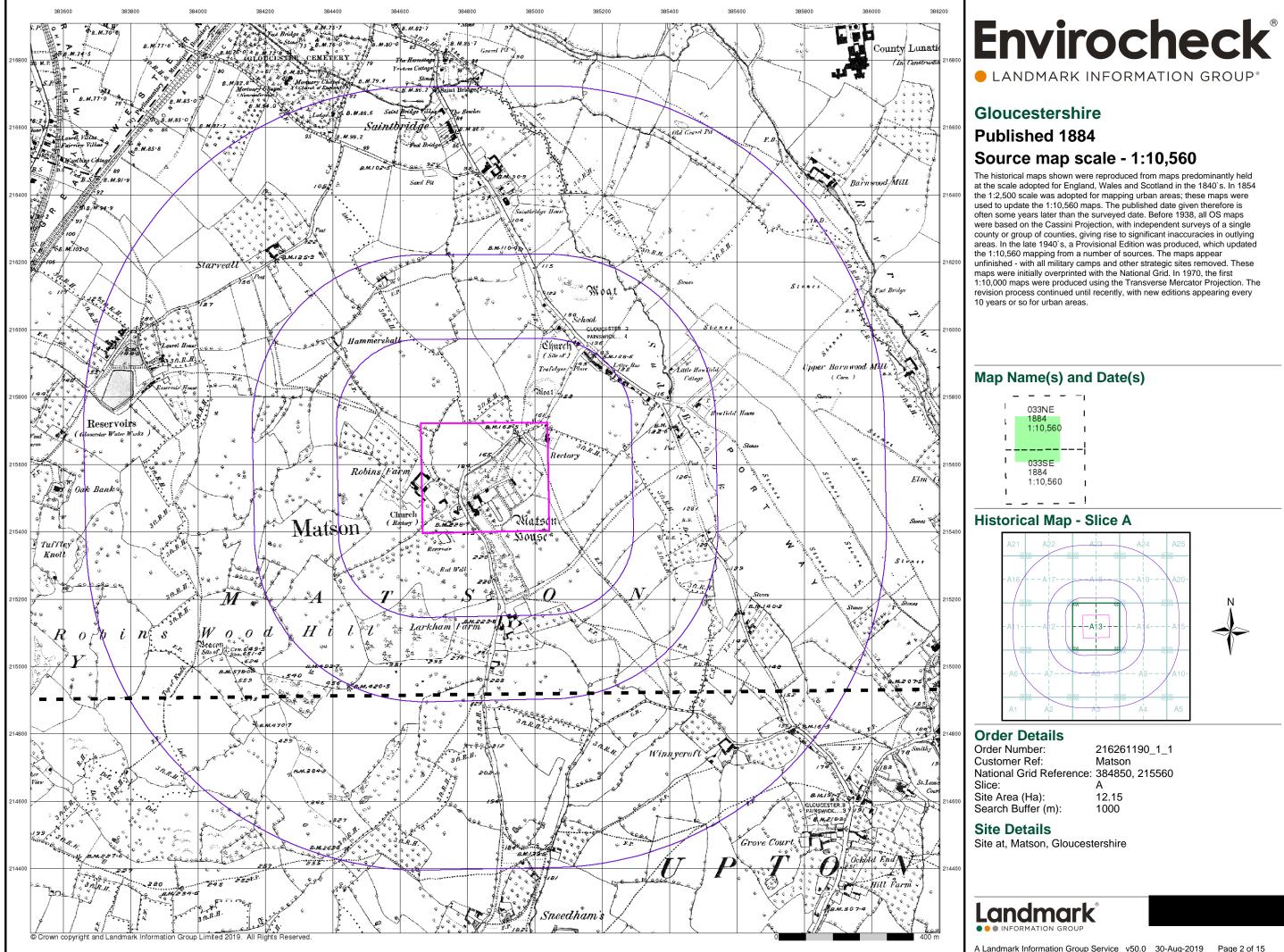
Order Details

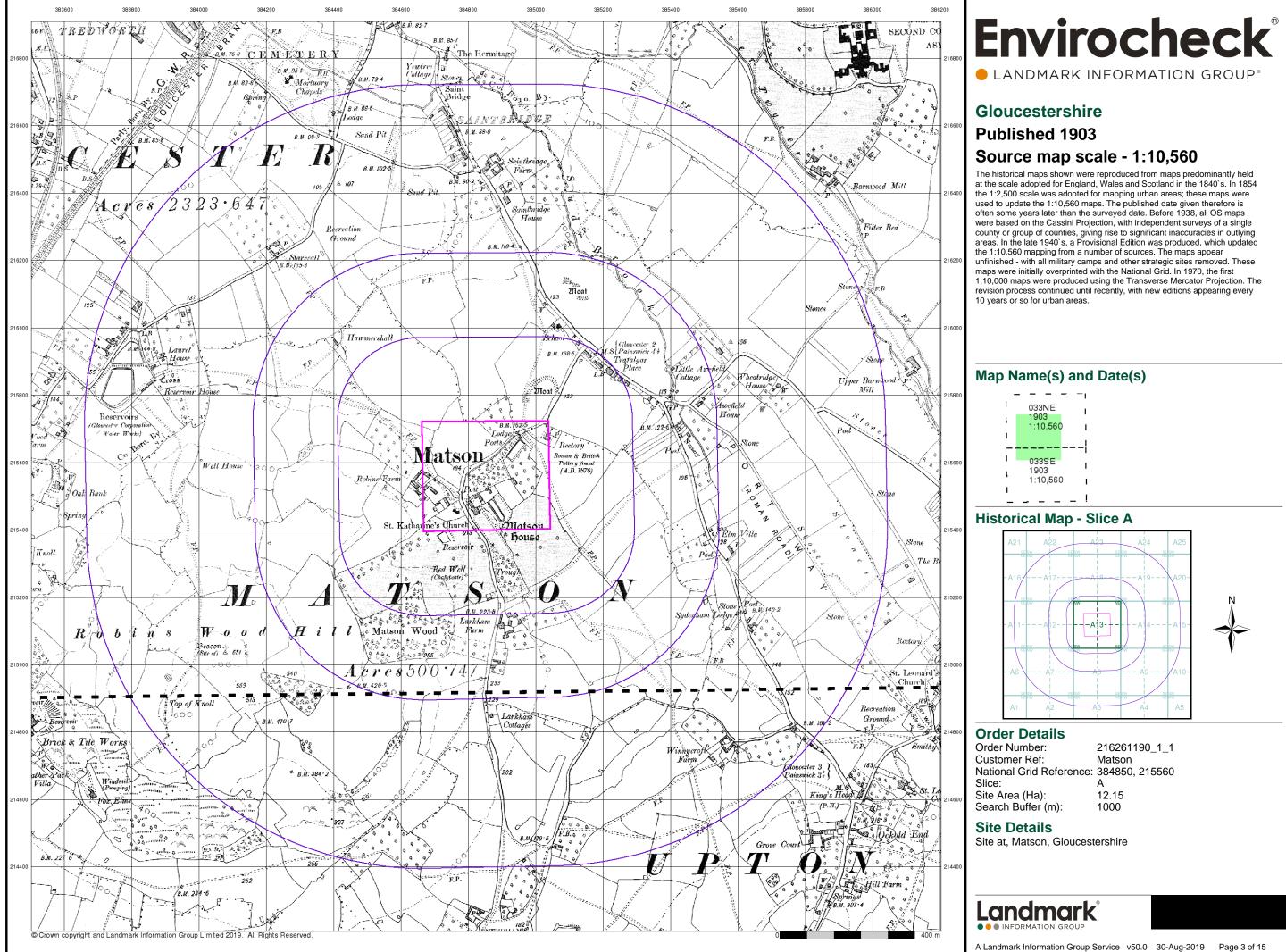
Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):1000

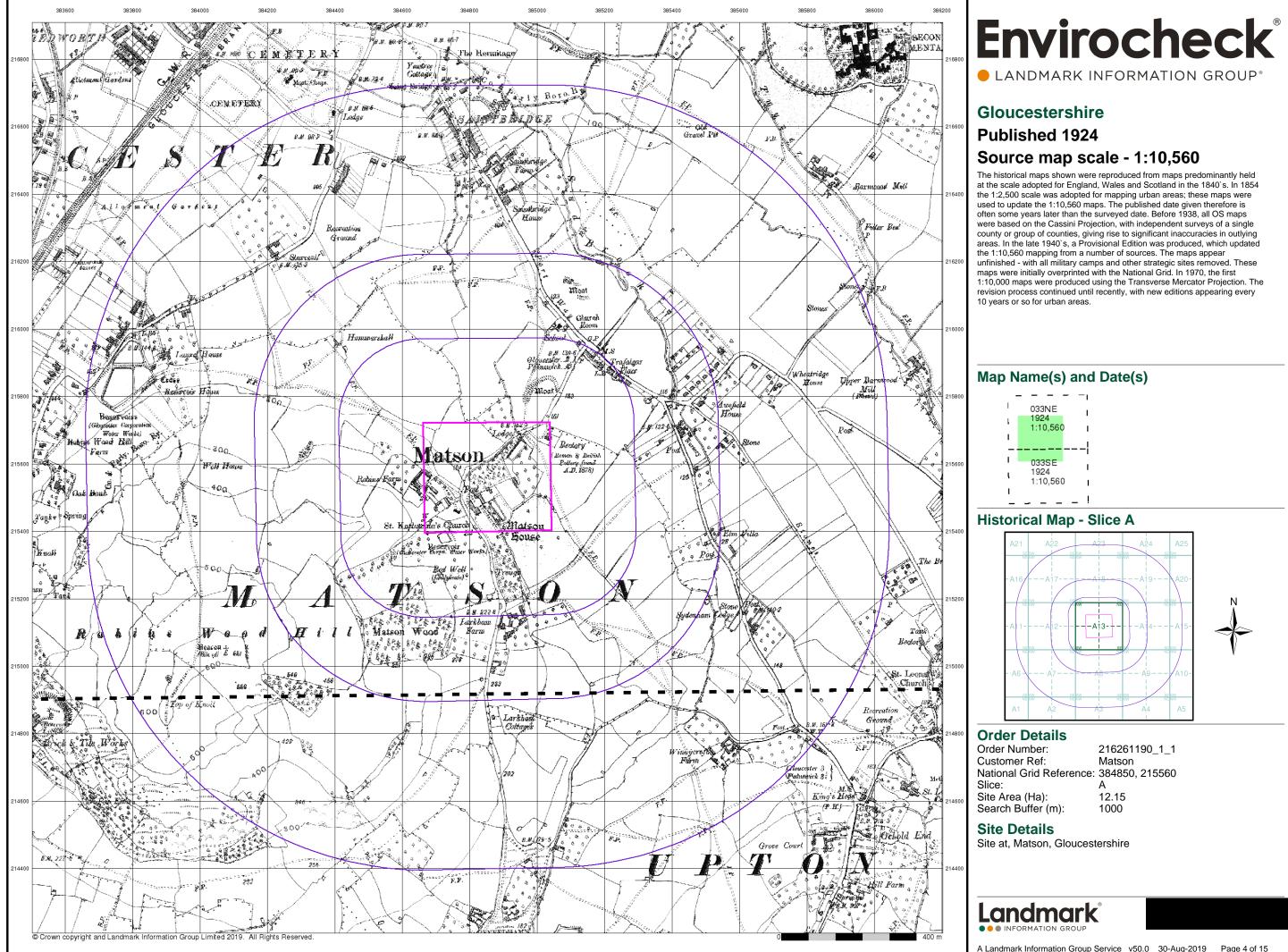
Site Details

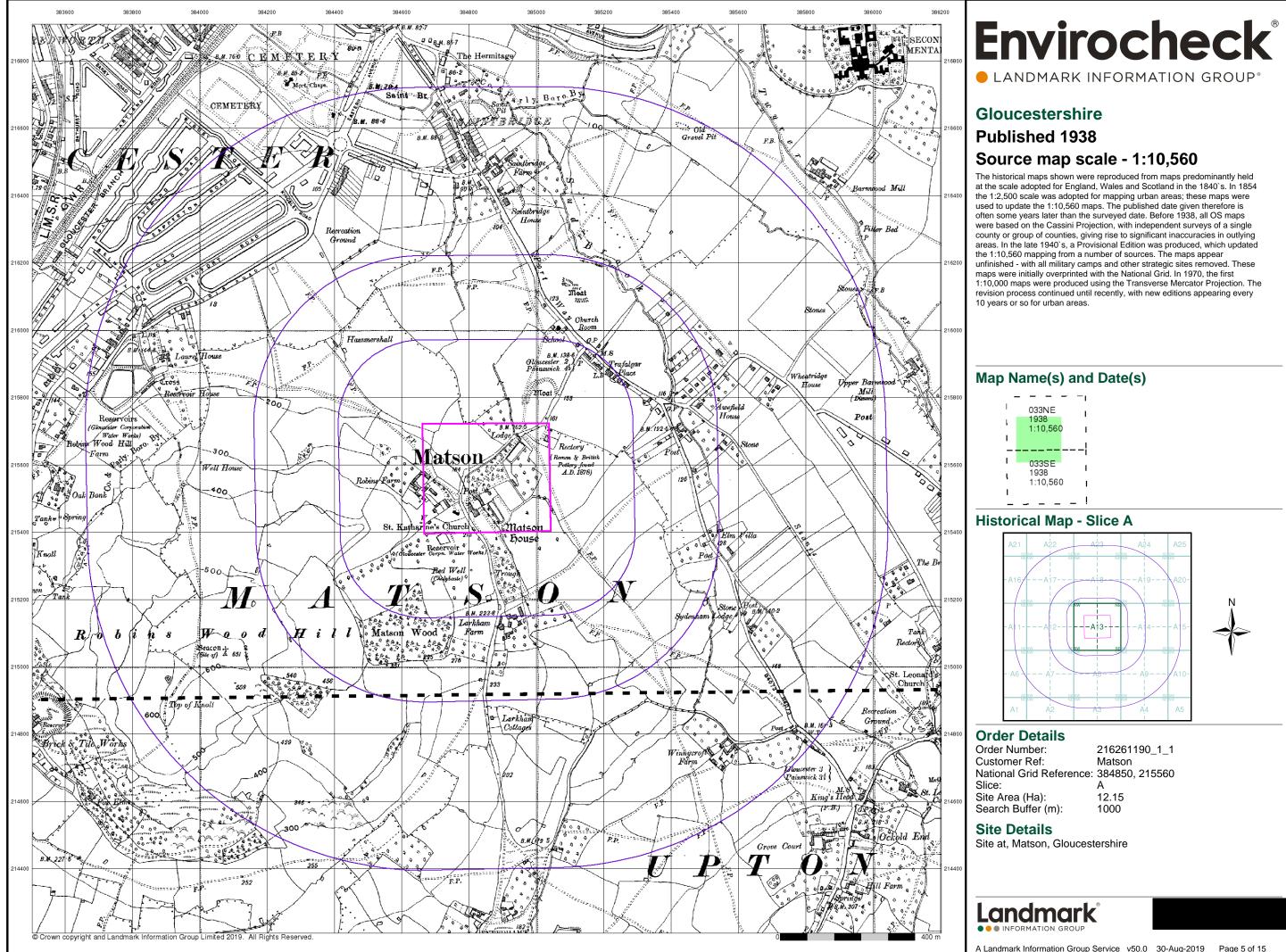
Site at, Matson, Gloucestershire

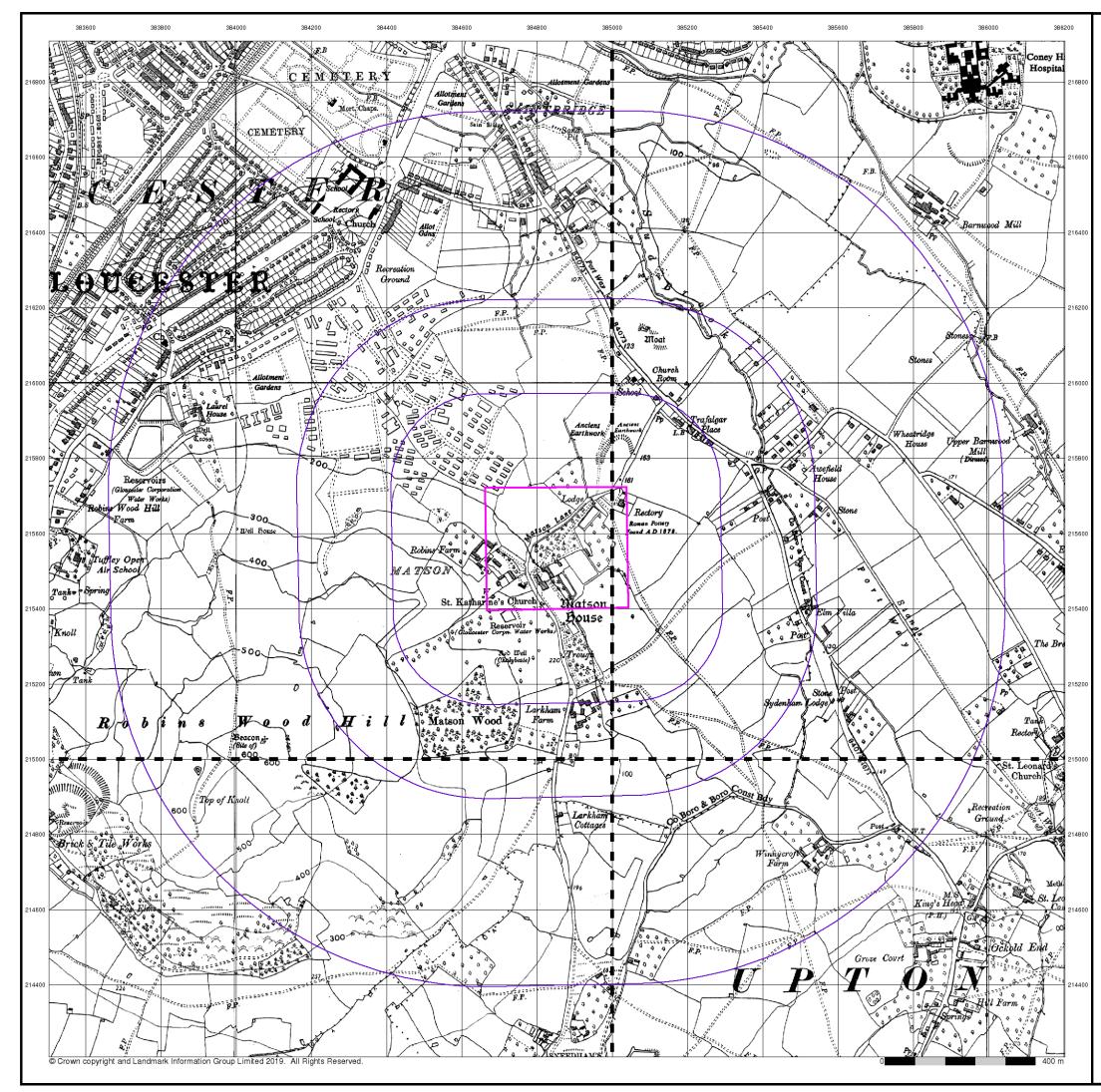












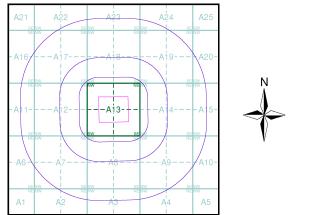
Ordnance Survey Plan Published 1954 - 1955 Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SO81NW SO81NE 1955 1955 1 1:10,560 1:10,560 1 SO81SW SO81SE 1954 1955 1 1:10,560 1:10,560 1 1:10,560 1

Historical Map - Slice A

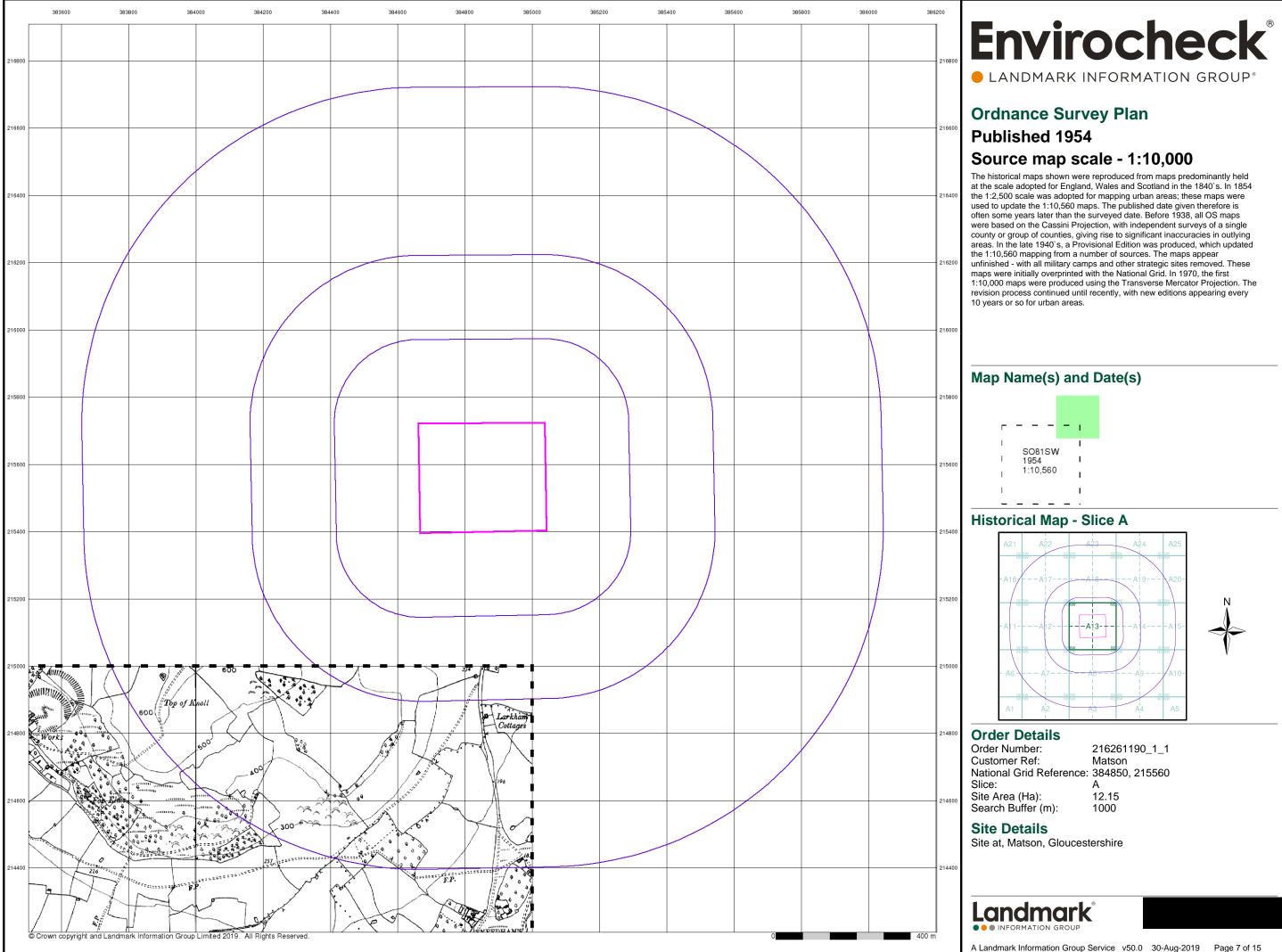


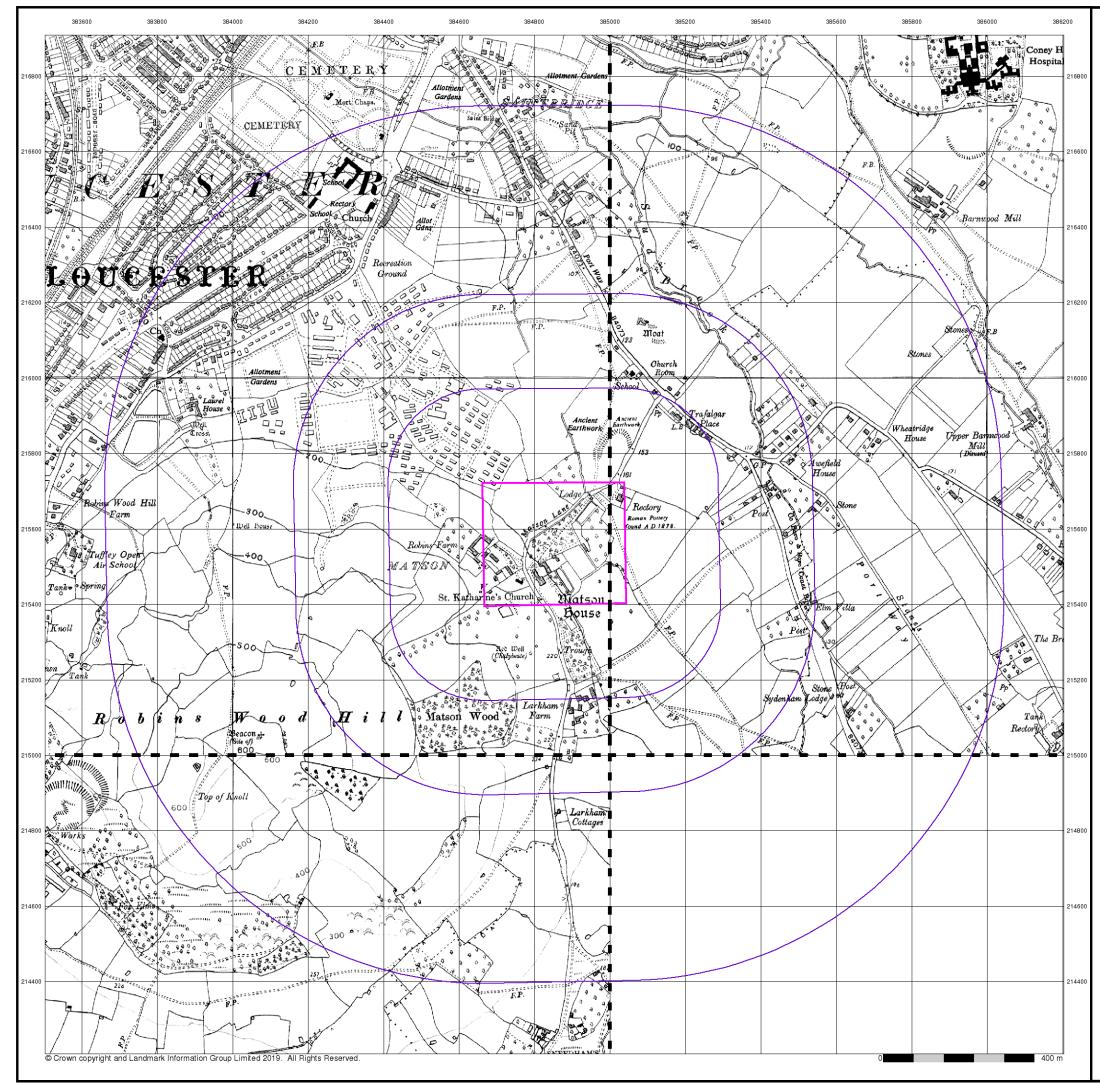
Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):1000

Site Details



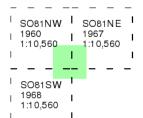




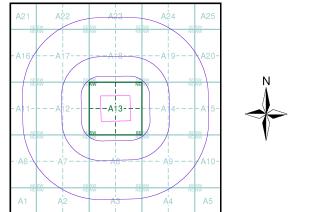
Ordnance Survey Plan Published 1960 - 1968 Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

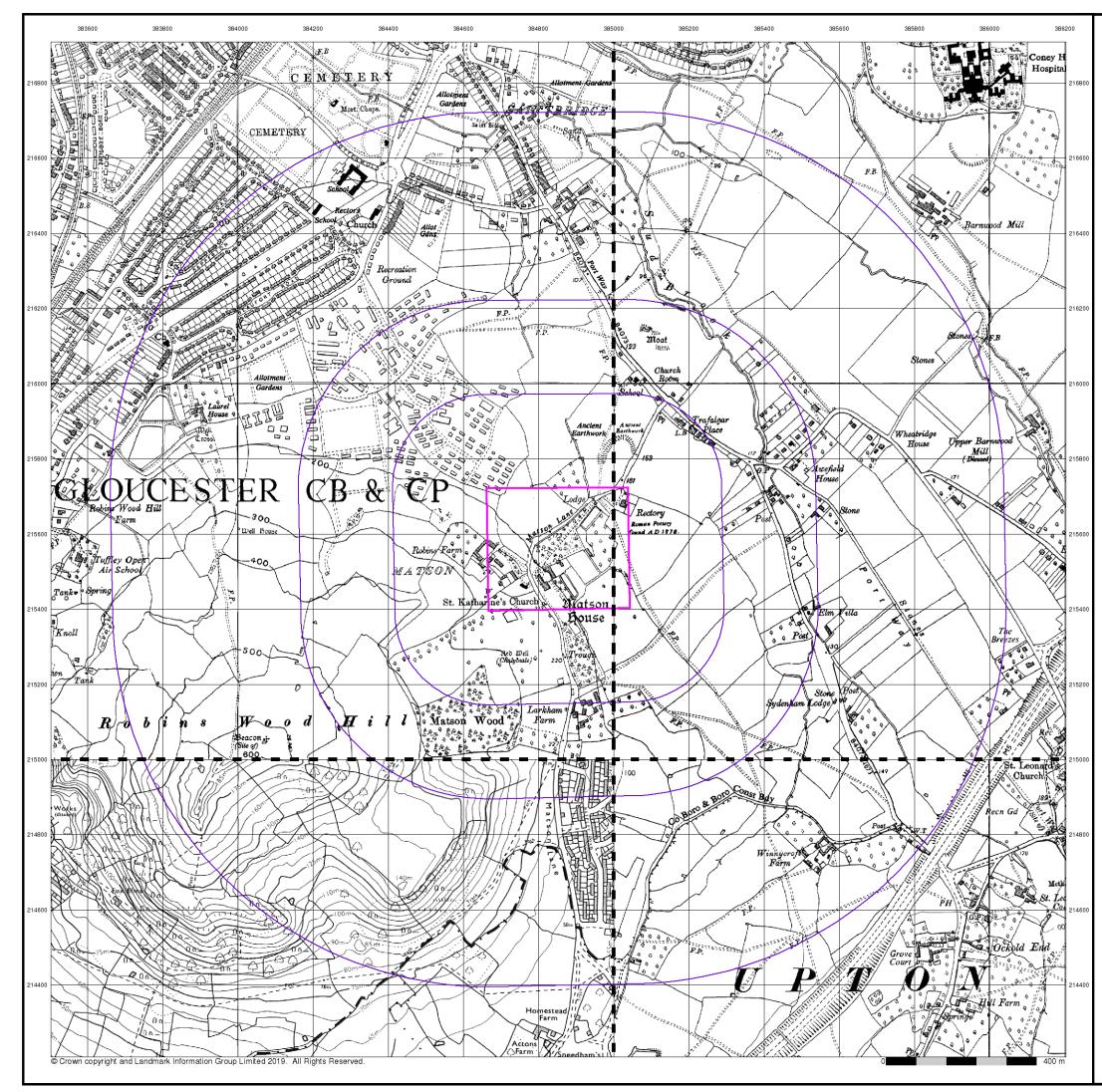


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):1000

Site Details





Ordnance Survey Plan Published 1971 - 1974 Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

 SO81NW
 SO81NE
 1971
 1971
 1

 110,560
 1:10,560
 1:10,560
 1

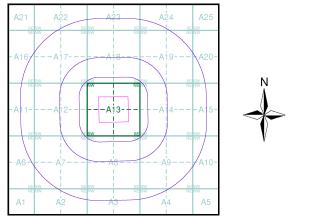
 SO81SW
 SO81SE
 1
 1

 1974
 1971
 1971
 1

 1974
 1971
 1:10,560
 1

 1974
 1971
 1:10,560
 1

Historical Map - Slice A

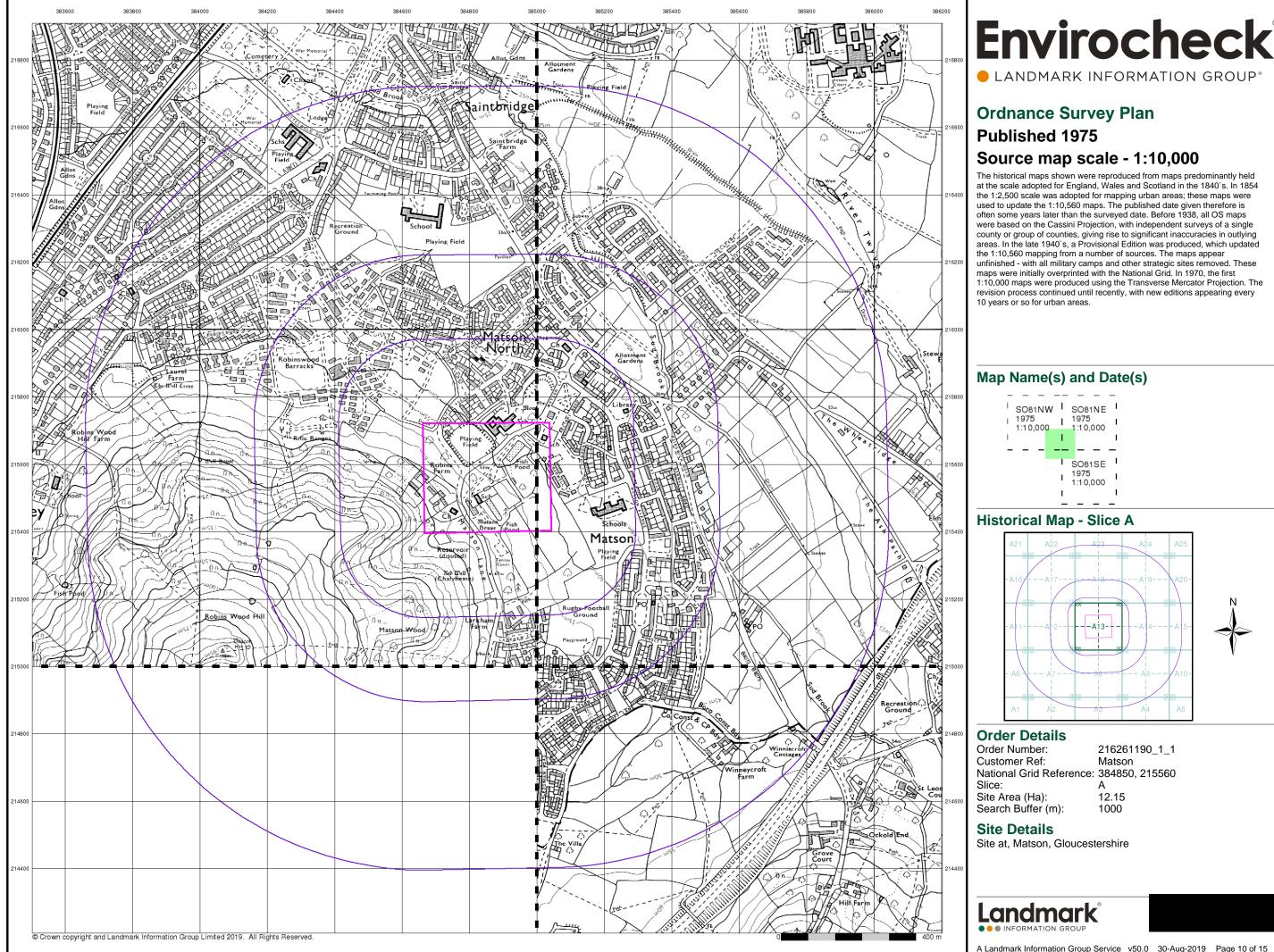


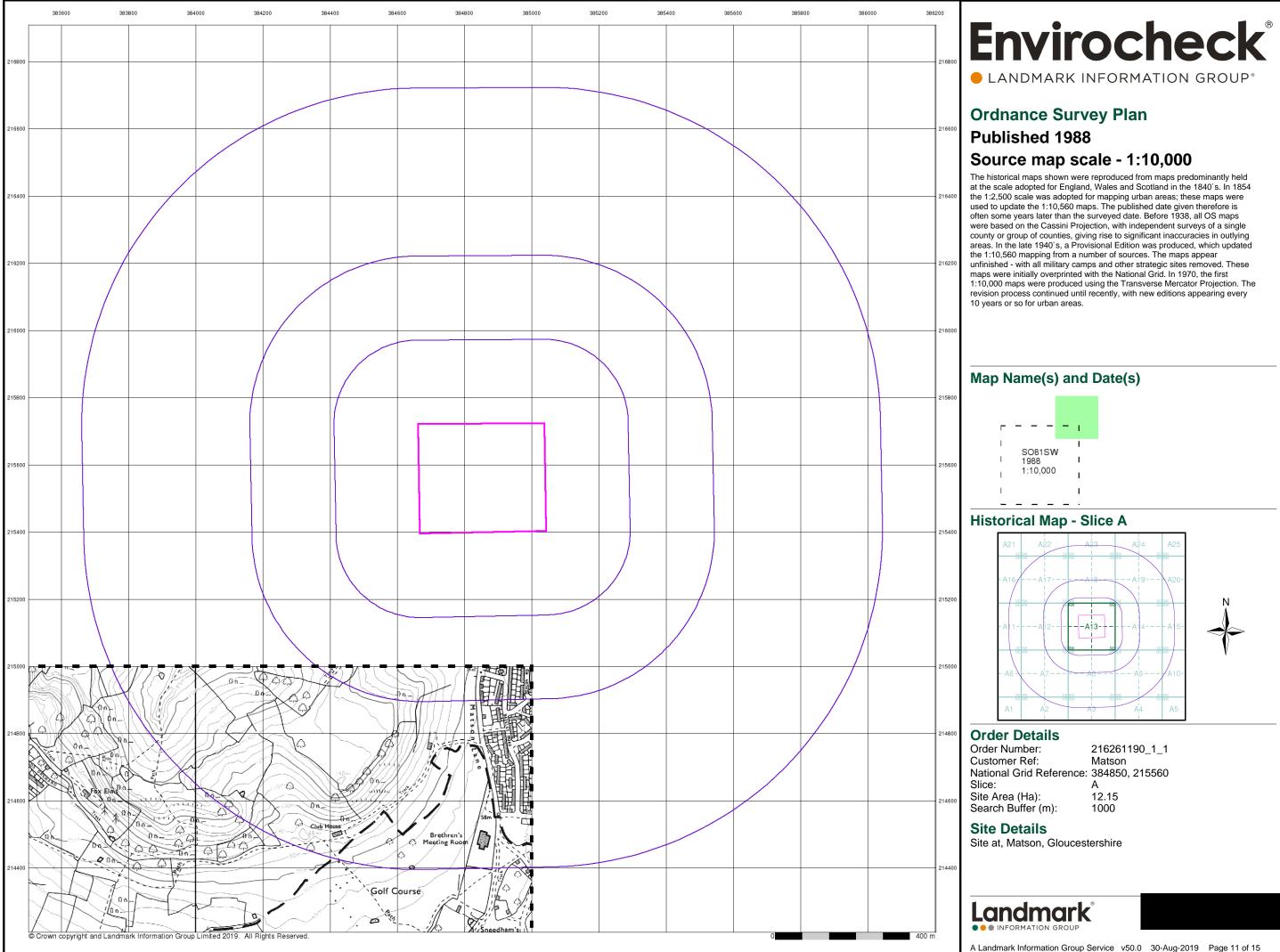
Order Details

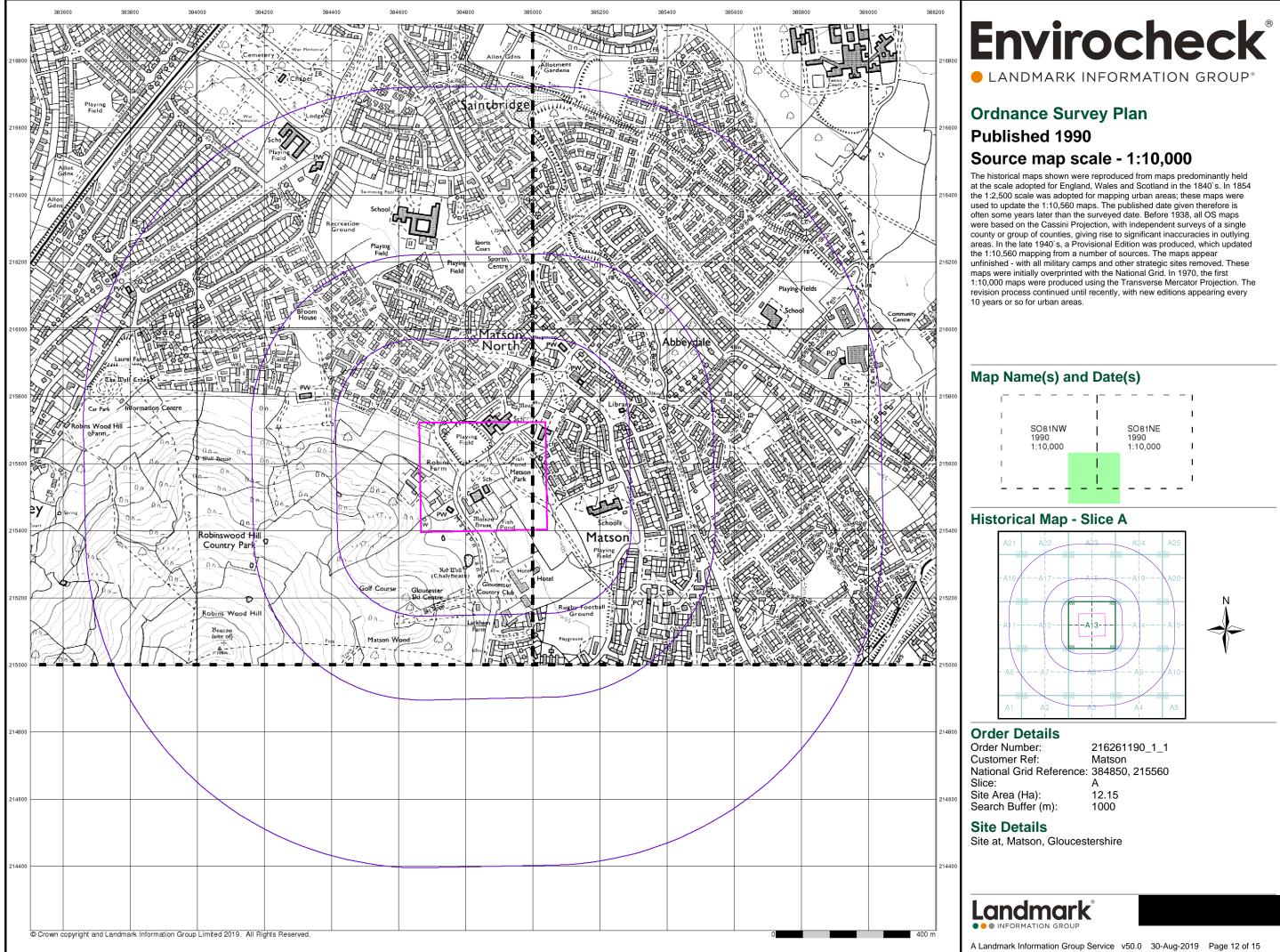
Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):1000

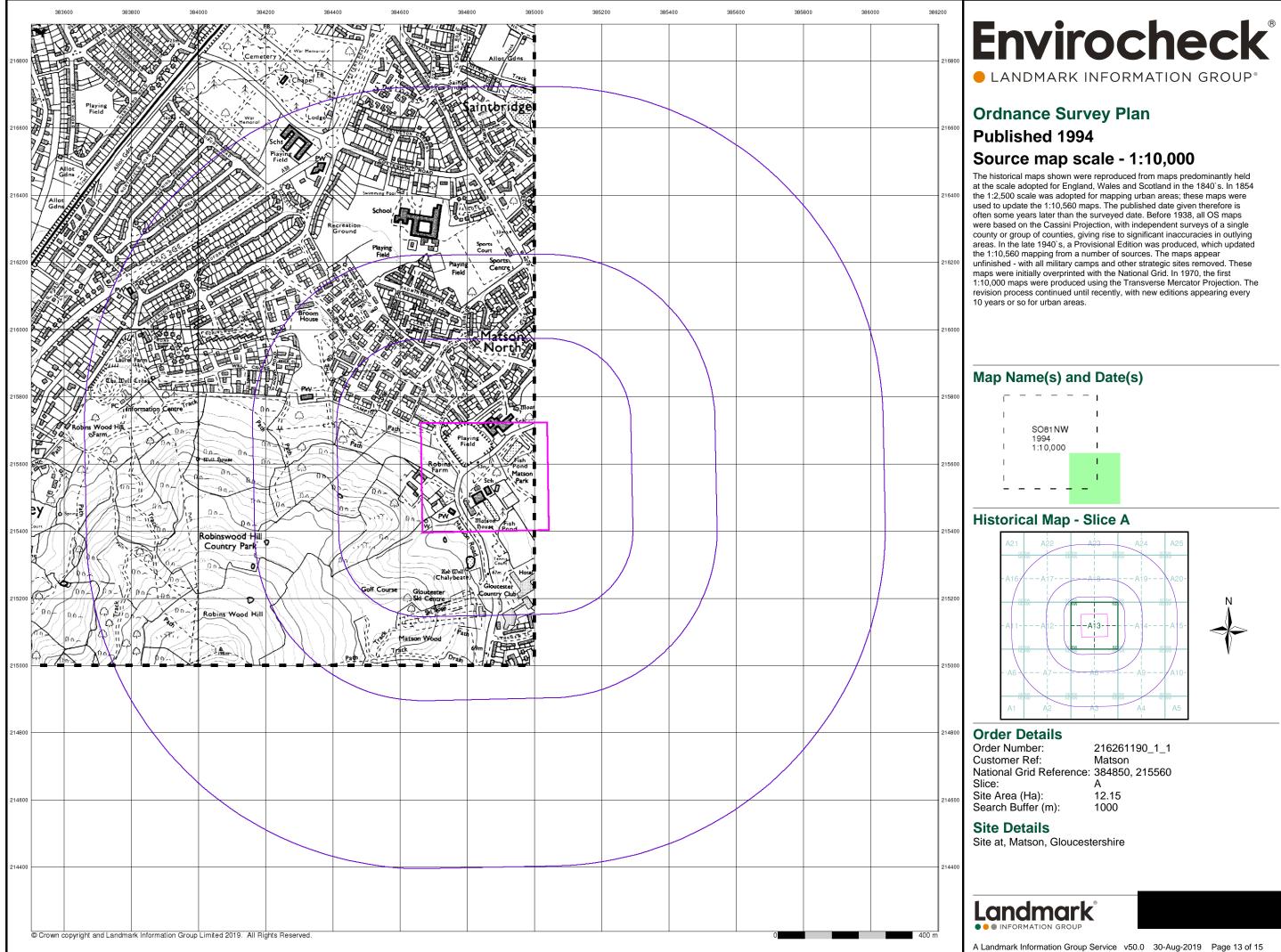
Site Details

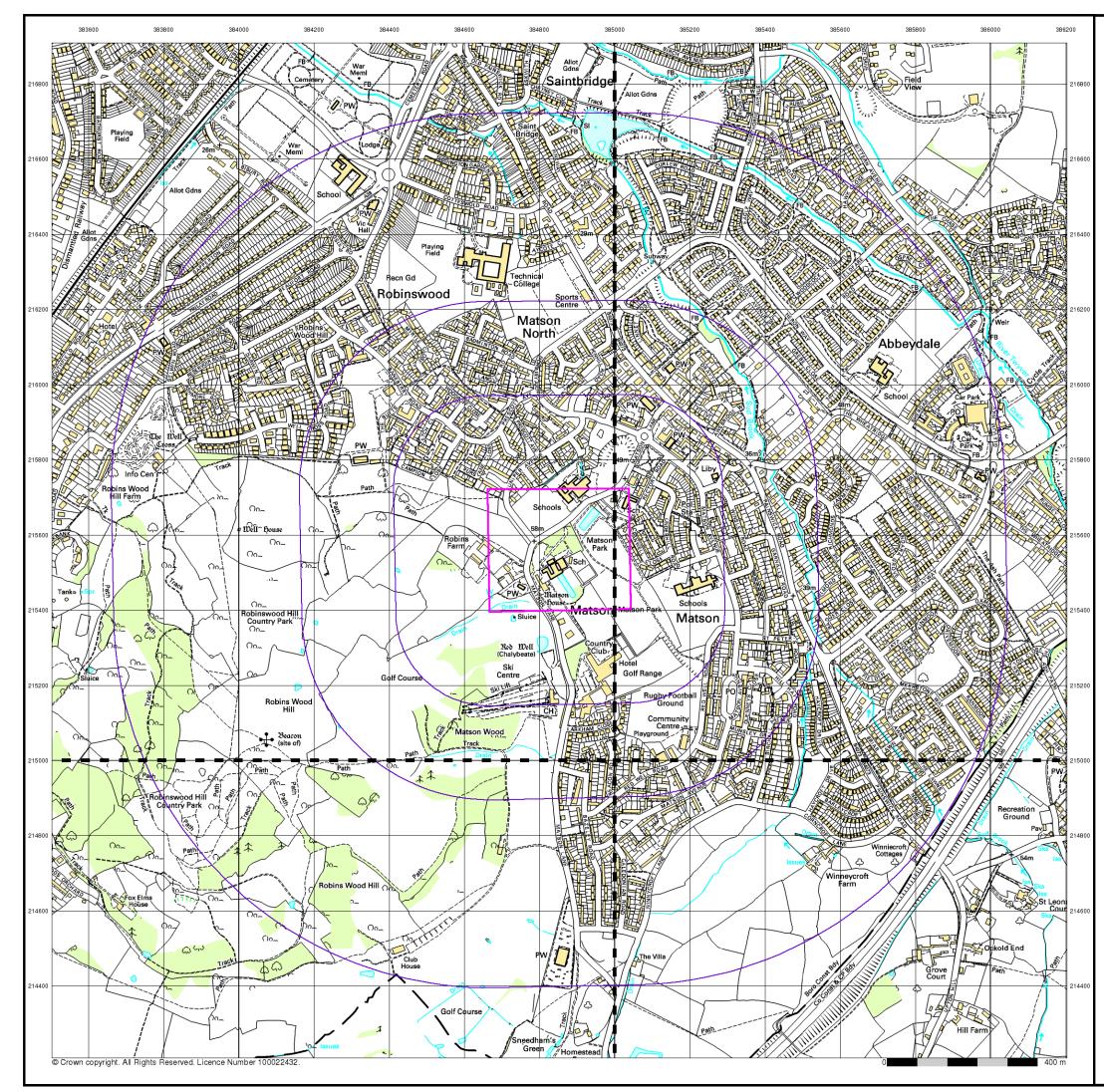












Envirocheck[®] LANDMARK INFORMATION GROUP[®]

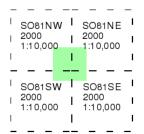
10k Raster Mapping

Published 2000

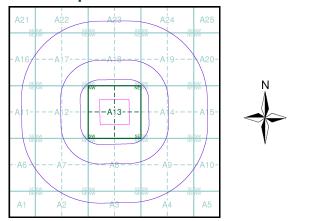
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A

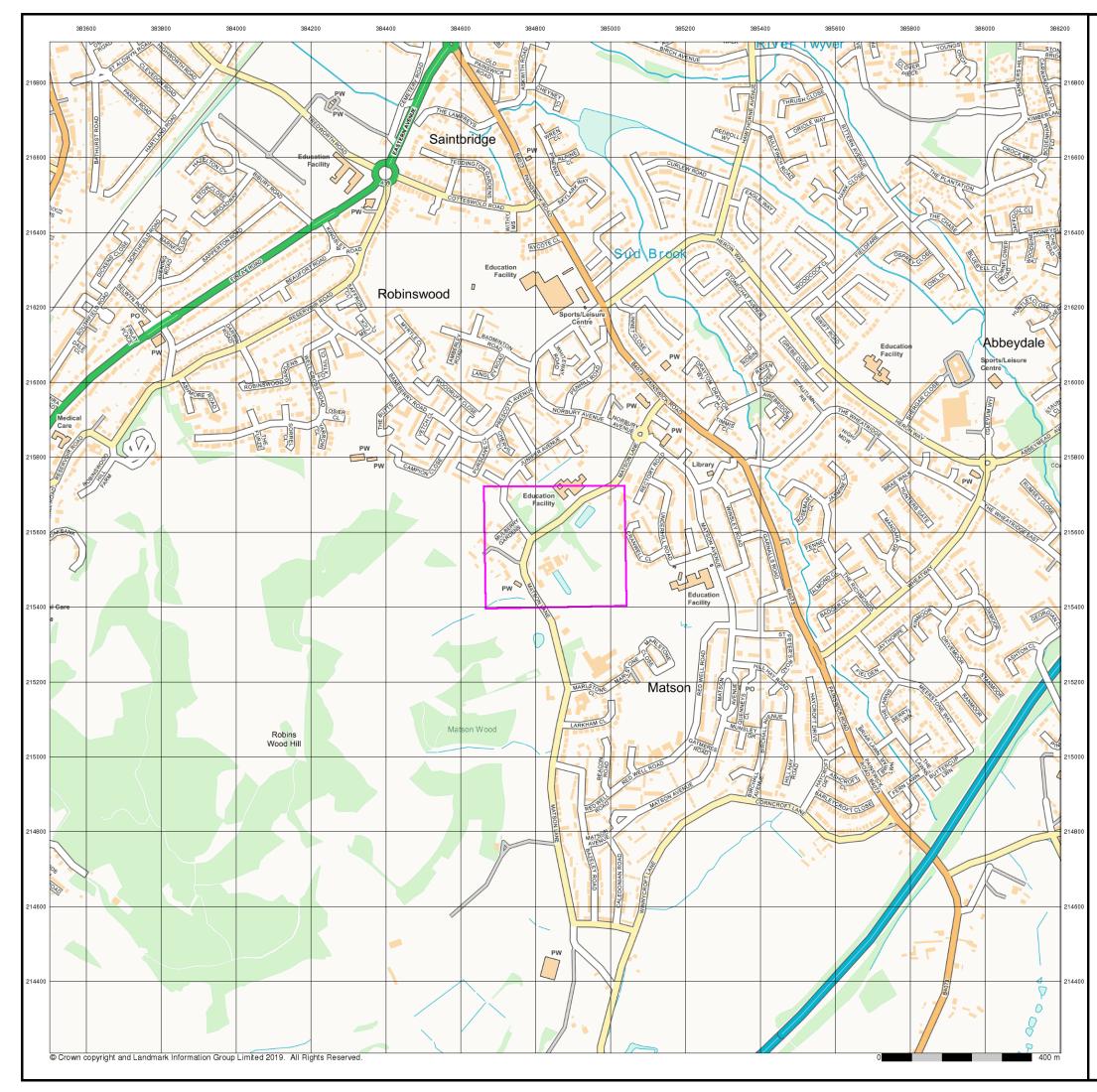


Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	A
Site Area (Ha):	12.15
Search Buffer (m):	1000

Site Details





Envirocheck[®] LANDMARK INFORMATION GROUP*

Street View

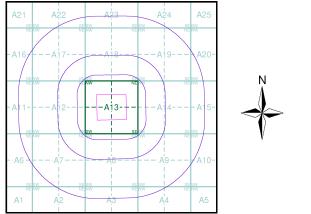
Published 2019

Source map scale - 1:10,000

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

Map Name(s) and Date(s)

Street View Map - Slice A



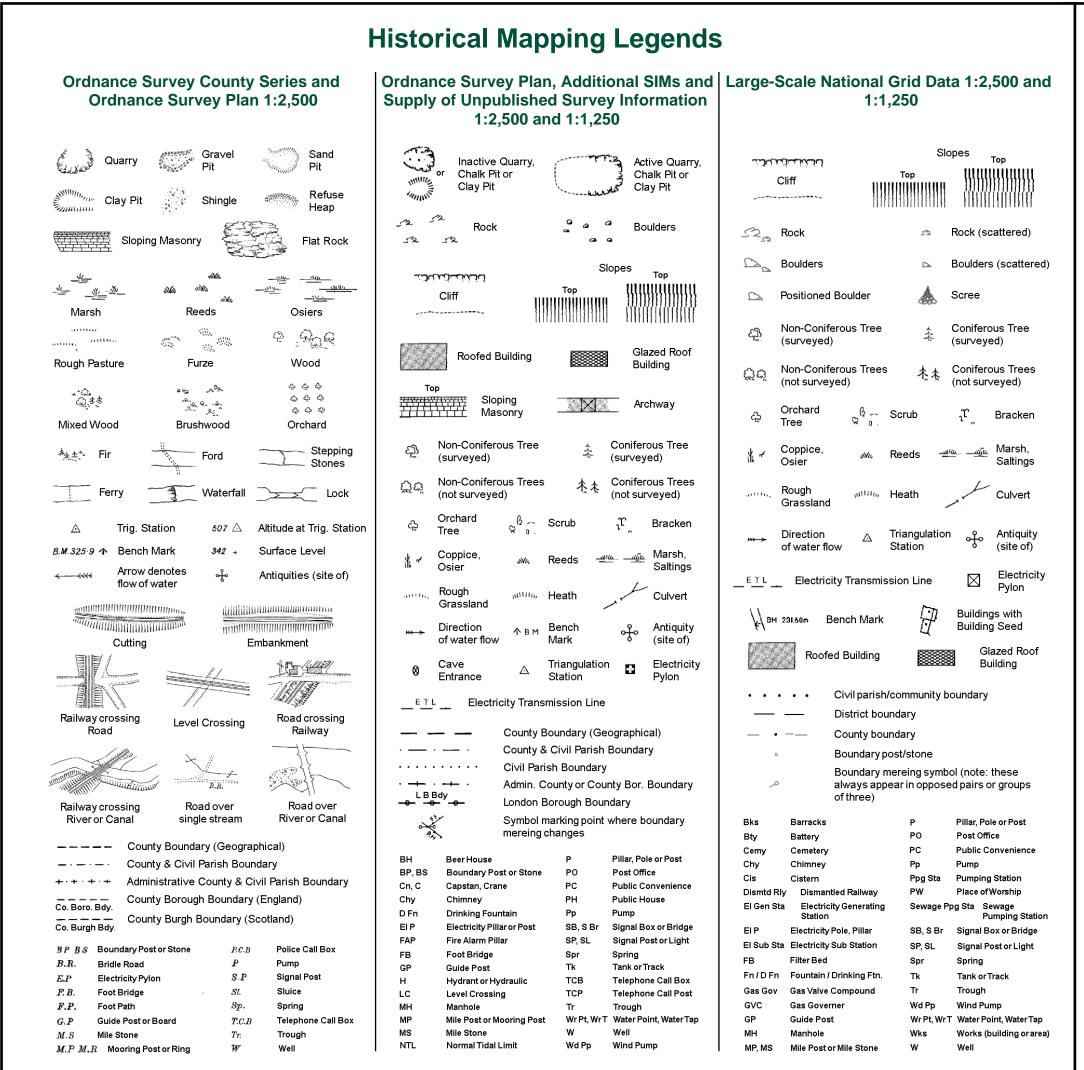
Order Details

Order Number: Customer Ref: National Grid Reference: 384850, 215560 Slice: Site Area (Ha): Search Buffer (m):

216261190_1_1 Matson А 12.15 1000

Site Details

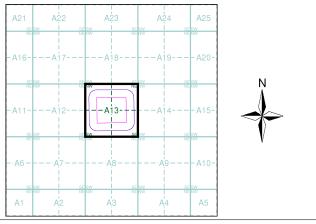




Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Gloucestershire	1:2,500	1884	2
Gloucestershire	1:2,500	1902	3
Gloucestershire	1:2,500	1923	4
Gloucestershire	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1956	6
Ordnance Survey Plan	1:1,250	1956	7
Ordnance Survey Plan	1:1,250	1962 - 1972	8
Additional SIMs	1:1,250	1977 - 1987	9
Ordnance Survey Plan	1:1,250	1978 - 1985	10
Additional SIMs	1:1,250	1984 - 1993	11
Additional SIMs	1:2,500	1990	12
Additional SIMs	1:1,250	1992	13
Large-Scale National Grid Data	1:1,250	1994	14

Historical Map - Segment A13

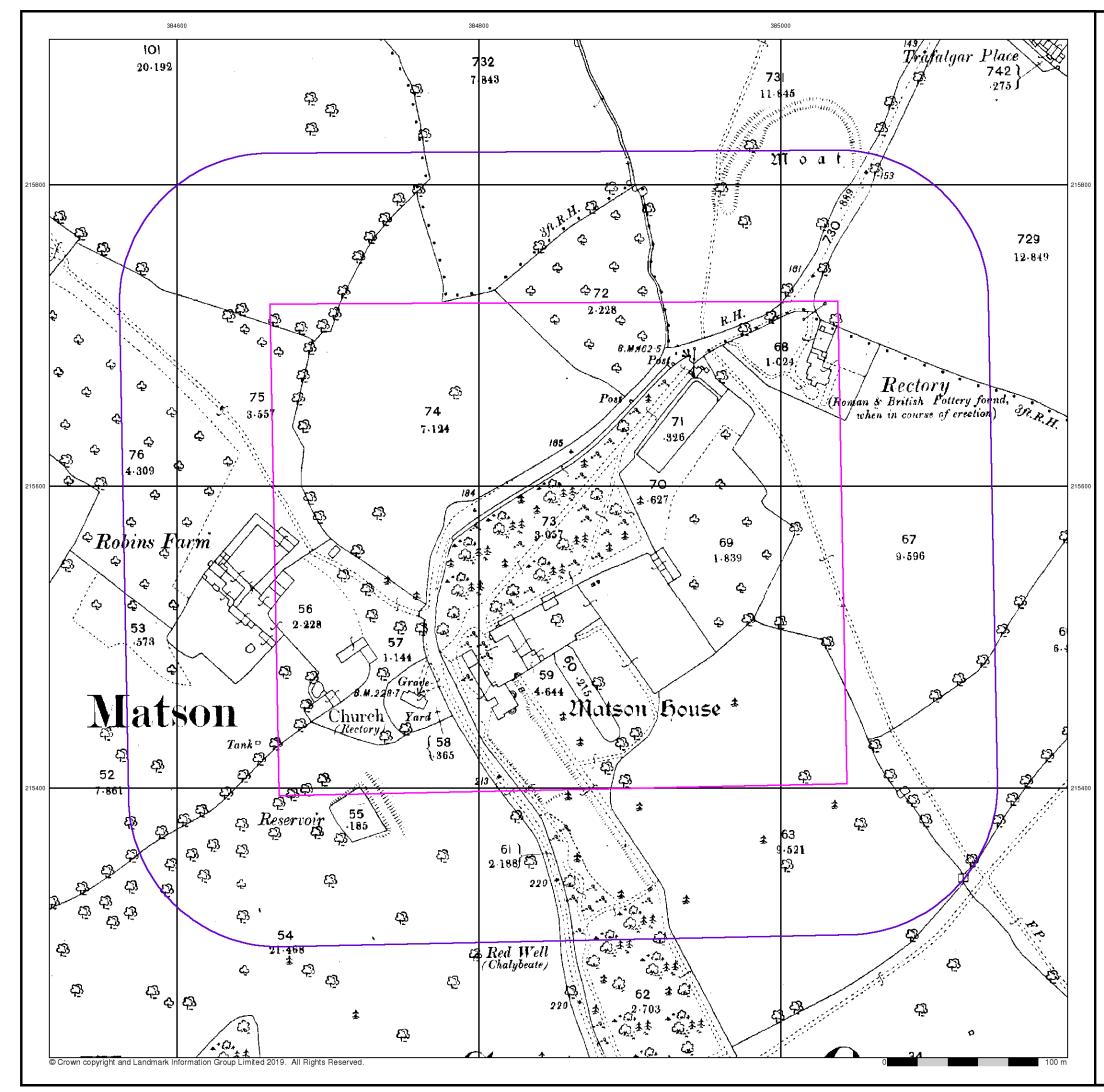


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):100

Site Details





Envirocheck[®] LANDMARK INFORMATION GROUP[®]

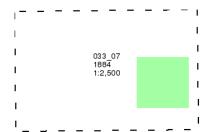
Gloucestershire

Published 1884

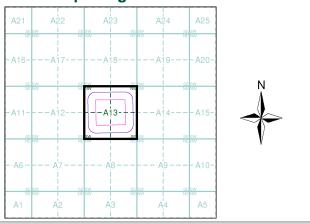
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

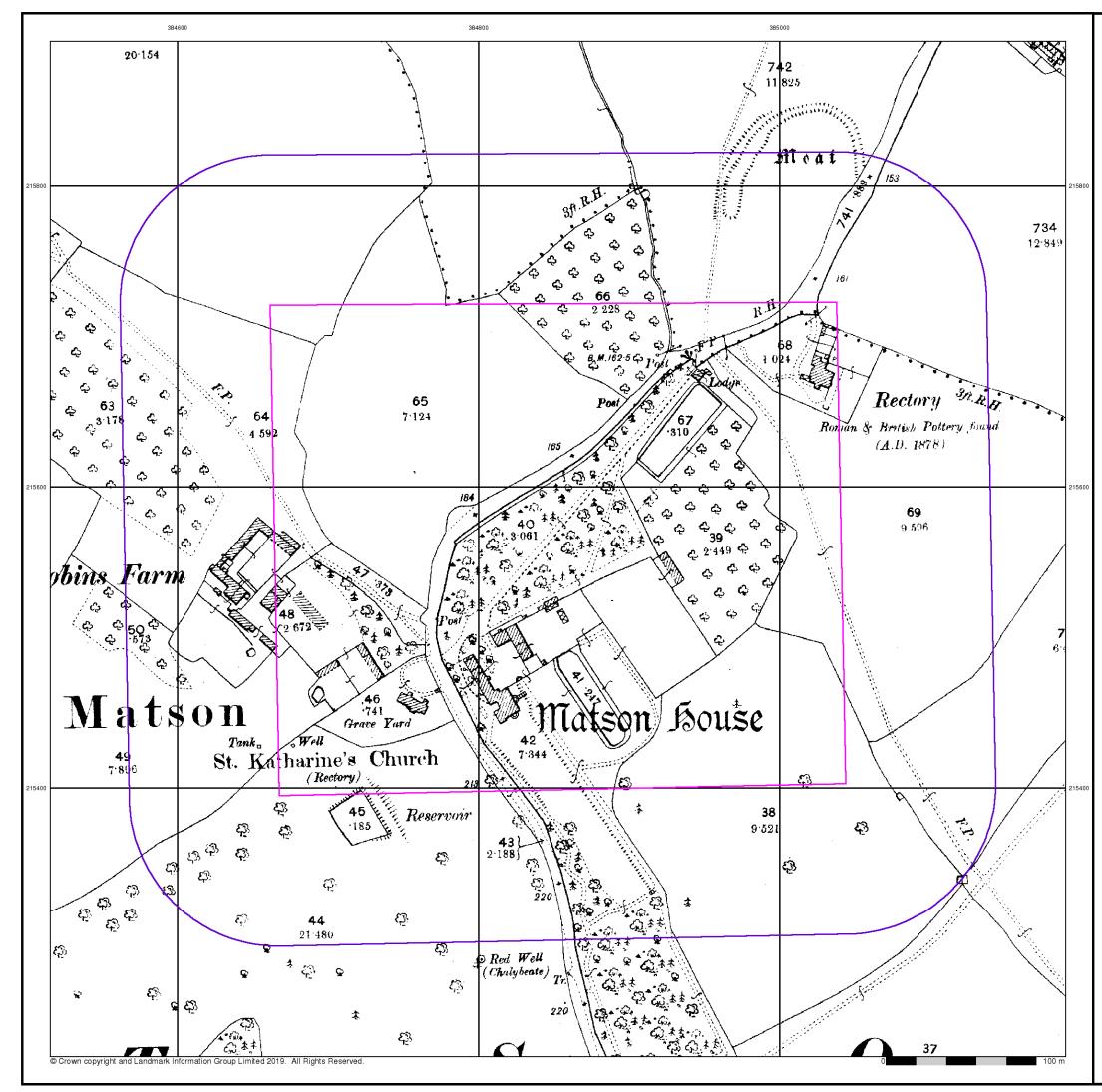


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):100

Site Details





Envirocheck[®] LANDMARK INFORMATION GROUP[®]

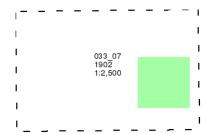
Gloucestershire

Published 1902

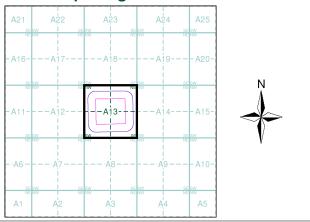
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

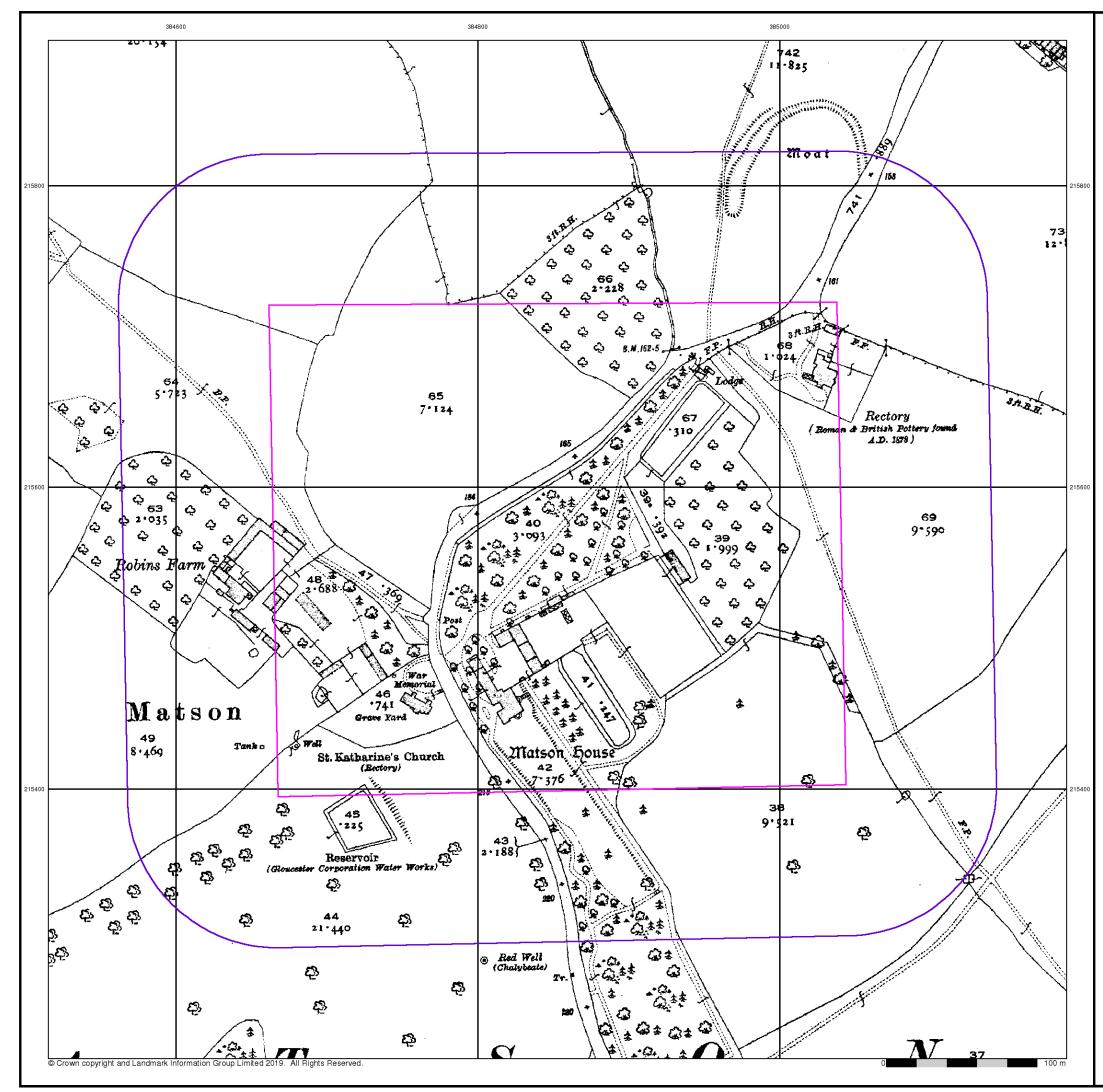


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):100

Site Details





Envirocheck[®] LANDMARK INFORMATION GROUP[®]

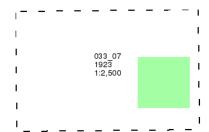
Gloucestershire

Published 1923

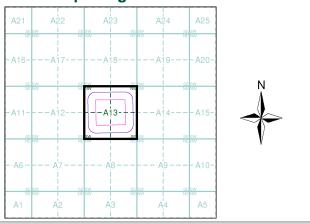
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

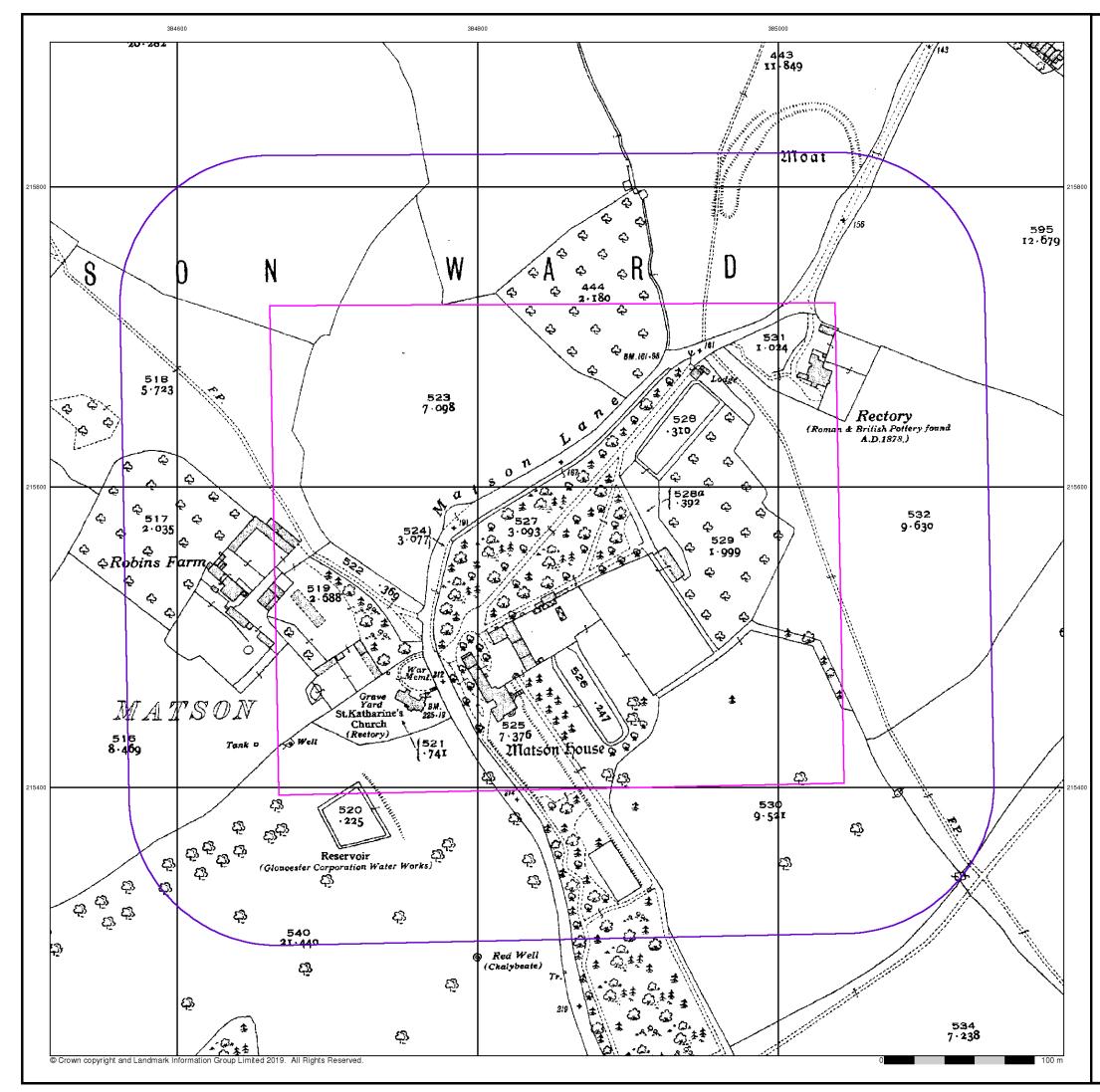


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):100

Site Details





Envirocheck[®] LANDMARK INFORMATION GROUP[®]

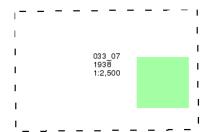
Gloucestershire

Published 1938

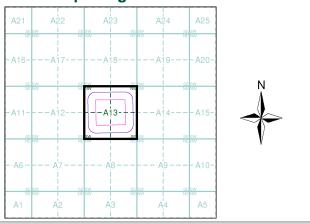
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

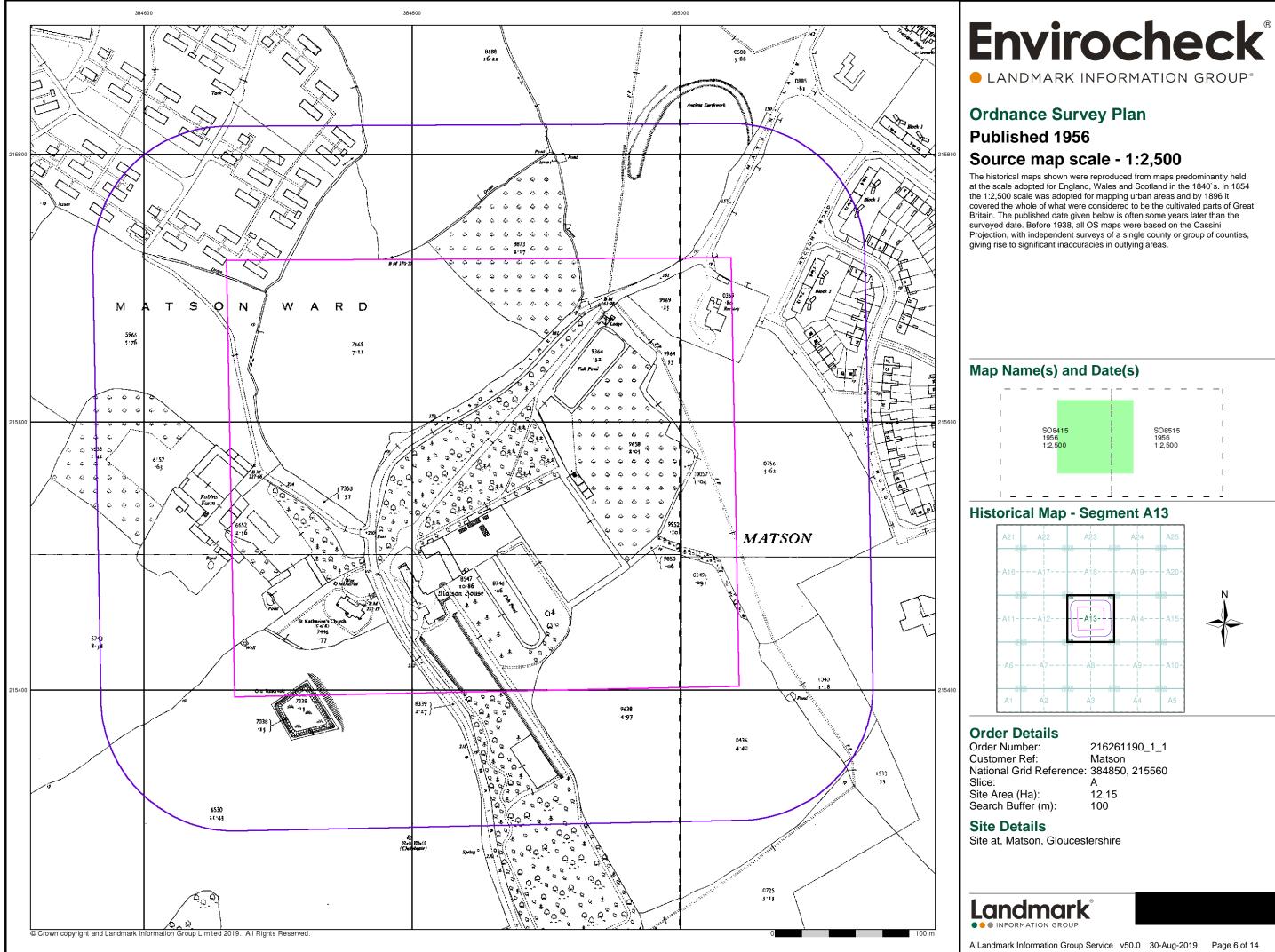


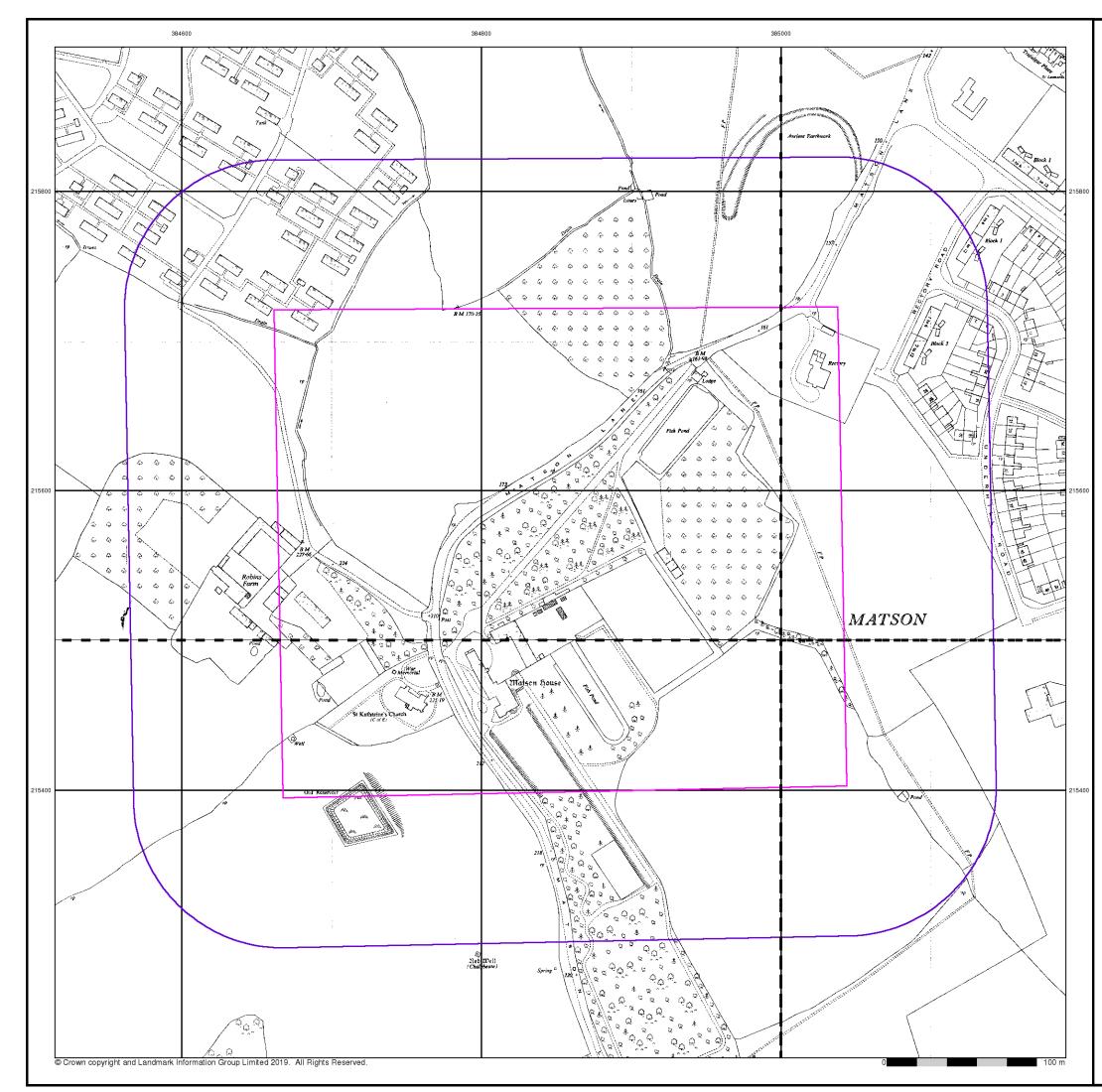
Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	A
Site Area (Ha):	12.15
Search Buffer (m):	100

Site Details







• LANDMARK INFORMATION GROUP*

Ordnance Survey Plan

Published 1956

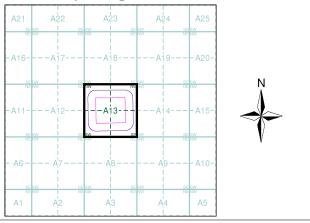
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

I	—	_	-	ī	-	-	_	L
1	SO	8415 56	5NE	T	SO8	515 6	NW	I.
I	1:1	,250		ī	1:1,	250		I
ł	_	_	_	I	_	-	_	ł
I	19		SE	I	195		sw	I
I	1:1	,250		I	1:1,3	250		I
I	_	_	_	I	_	_	_	I

Historical Map - Segment A13

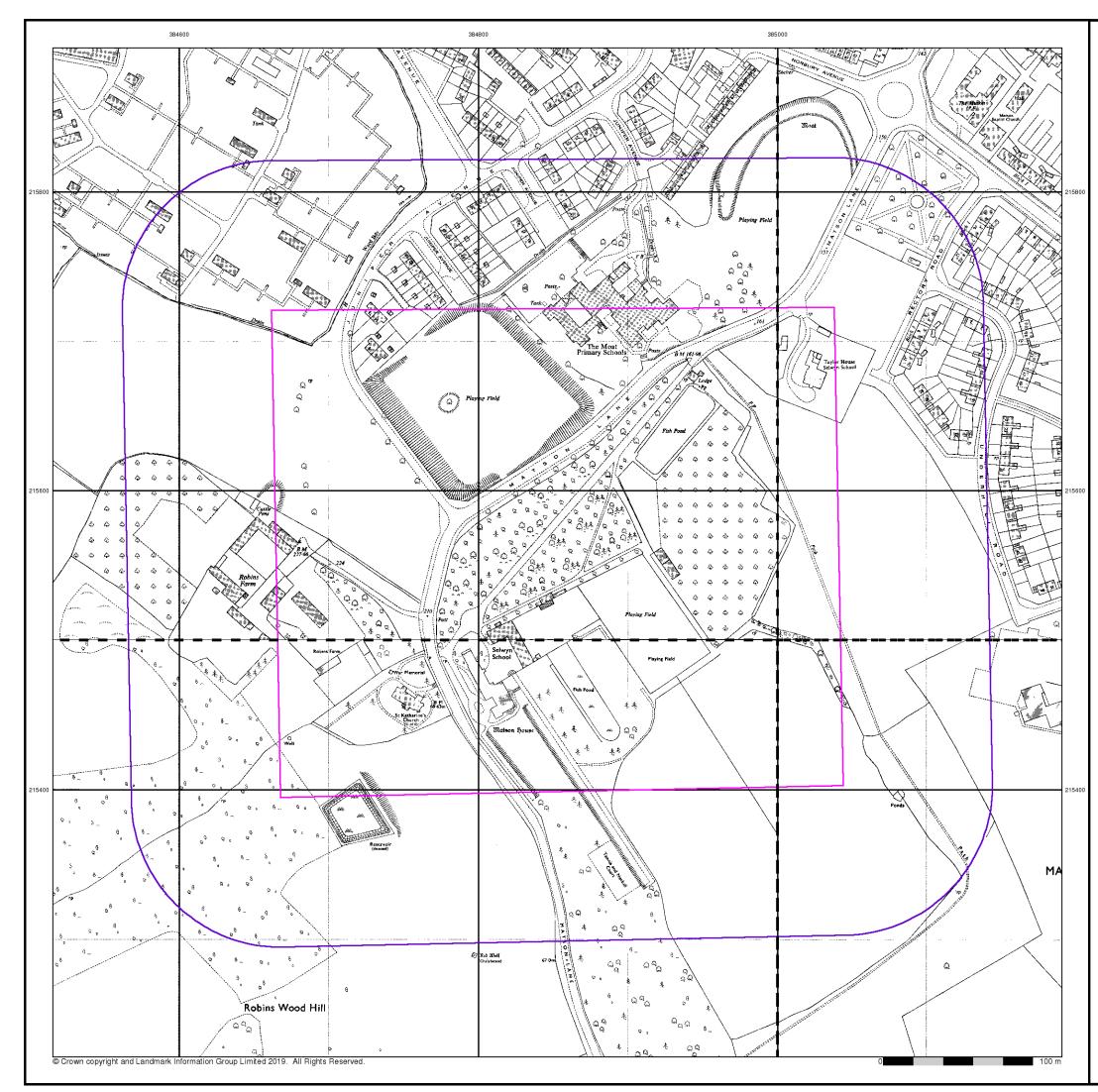


Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	Α
Site Area (Ha):	12.15
Search Buffer (m):	100

Site Details





Envirocheck[®] LANDMARK INFORMATION GROUP[®]

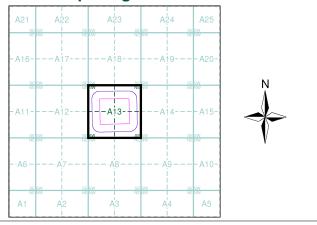
Ordnance Survey Plan Published 1962 - 1972 Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

Ι	—	—	-	I	-	_	_	I.
1	SO 196	8415 32	5NE	T	SO8	515 6	NW	L
1	1:1	,250		ī	1:1,2	250		I
	_	_	_	I	_	_	_	ł
-1	197	_	SE	I	197		sw	I
I	1.1	,250		I	1:1,2	250		I
I	_	_	_	I	_	_	_	I

Historical Map - Segment A13

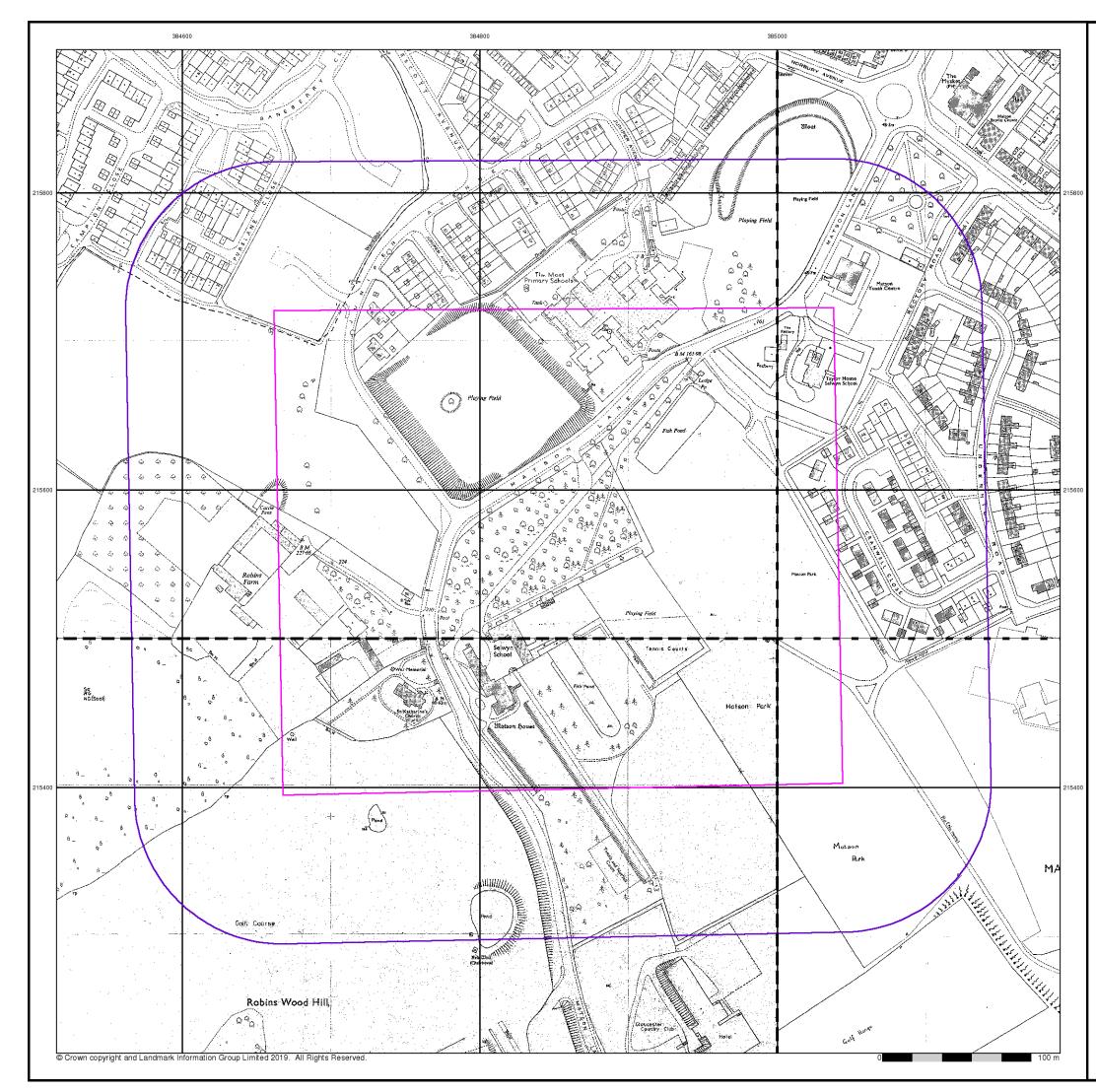


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):100

Site Details





Envirocheck[®] • LANDMARK INFORMATION GROUP[®]

Additional SIMs

Published 1977 - 1987

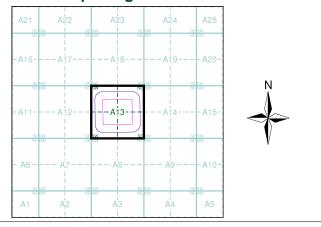
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

_			_	—	_
1	SO8415NE		SO85	15NV	γI
I	1977 1:1,250	I	1987 1:1,25	0	I
I		T.			Т
+			-	_	_
I	SO8415SE		 5085 ⁻	- 155V	_ , I
	SO8415SE 1984 1:1,250				 v I I

Historical Map - Segment A13

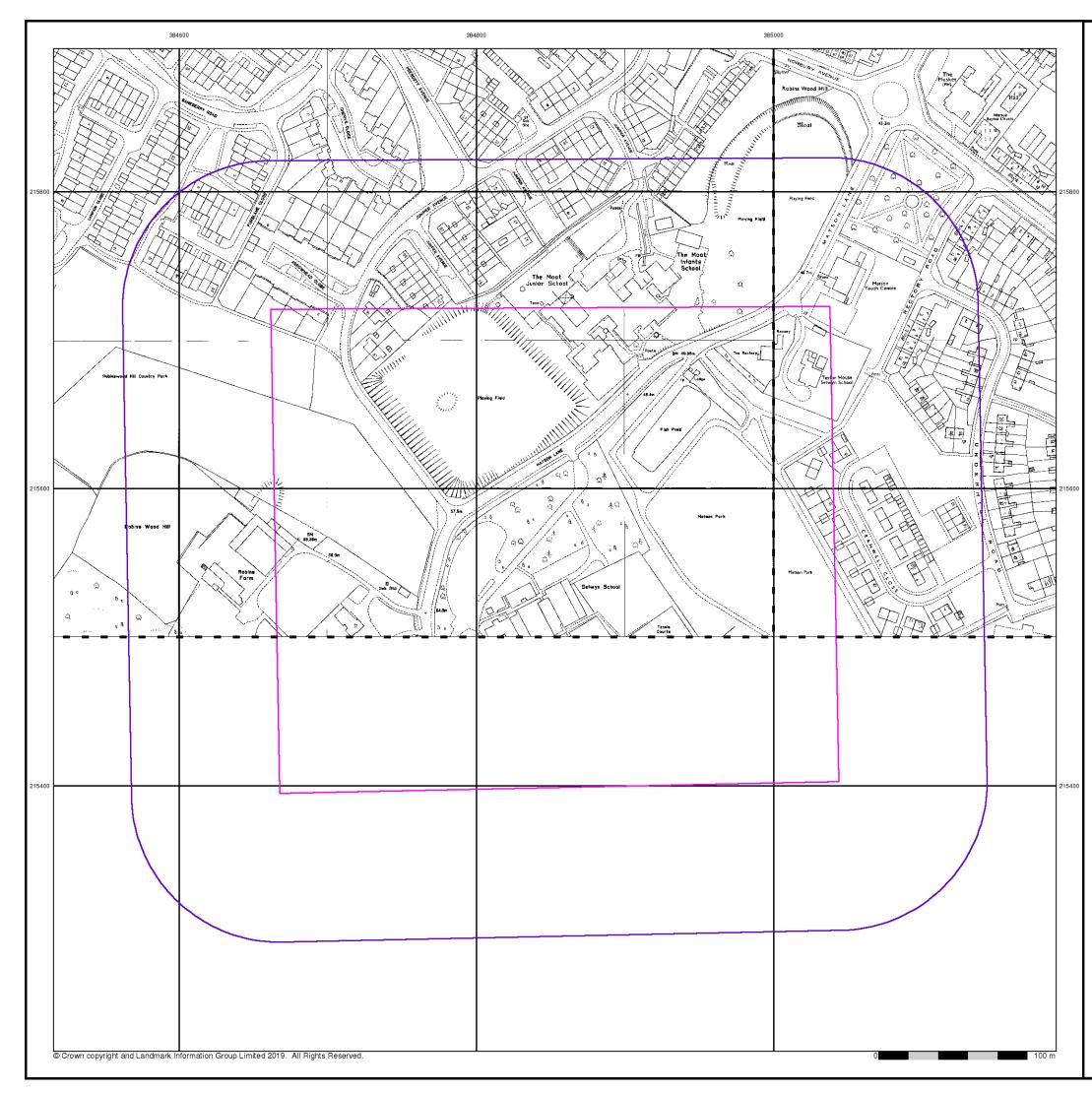


Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	A
Site Area (Ha):	12.15
Search Buffer (m):	100

Site Details





• LANDMARK INFORMATION GROUP*

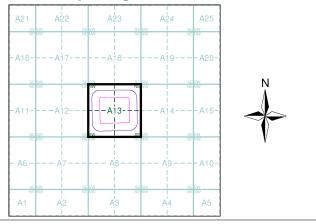
Ordnance Survey Plan Published 1978 - 1985 Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

I		- I			- I
I	SO8415NE			8515NW	, I
Т	1985 1:1,250	1	197 1:1	8 250	I.
1		1			I.
Ĺ		_1	_	L _	_ 1

Historical Map - Segment A13

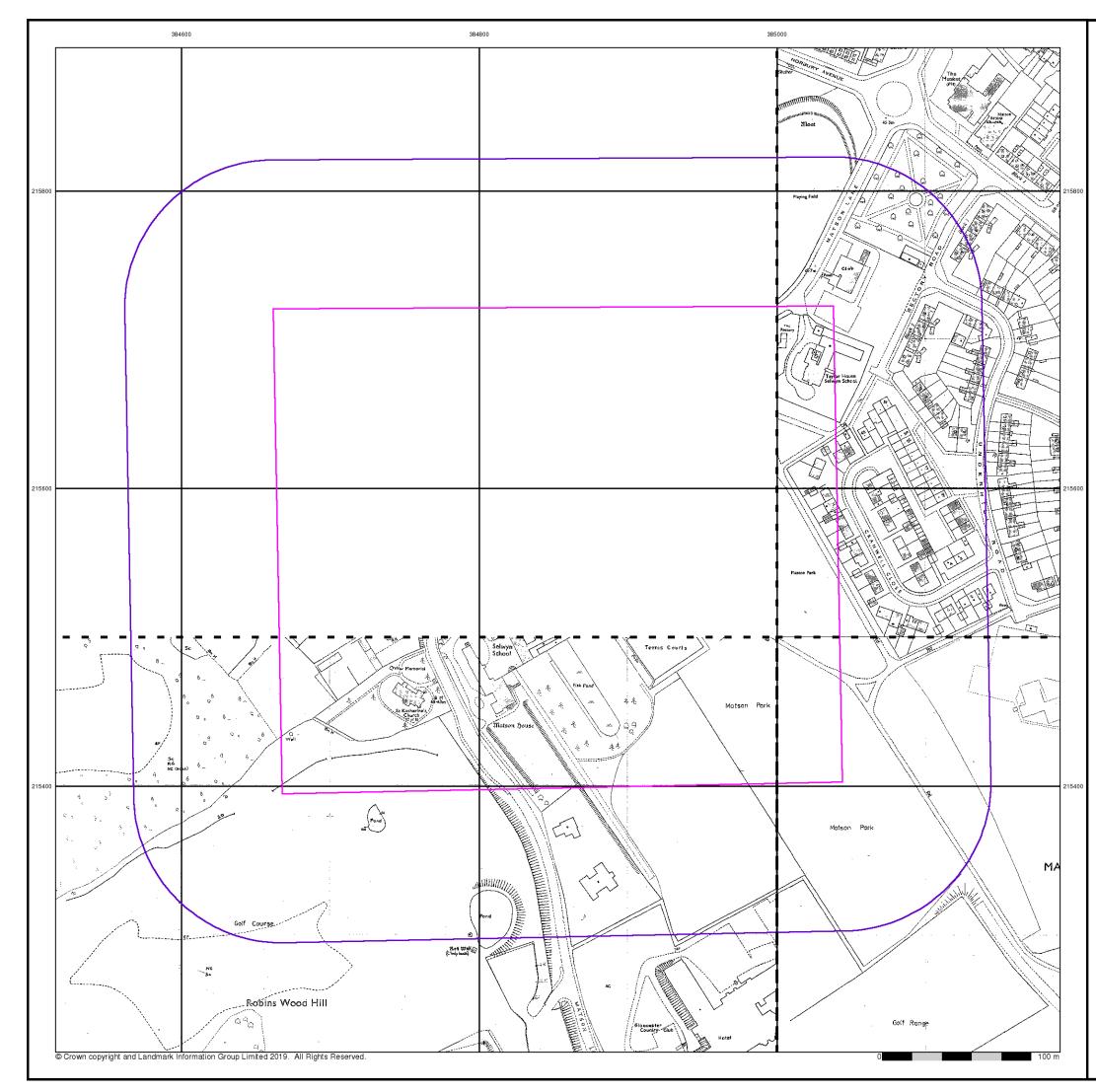


Order Details

Order Number:216261190_1_1Customer Ref:MatsonNational Grid Reference:384850, 215560Slice:ASite Area (Ha):12.15Search Buffer (m):100

Site Details





Envirocheck[®] • LANDMARK INFORMATION GROUP*

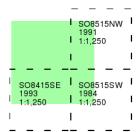
Additional SIMs

Published 1984 - 1993

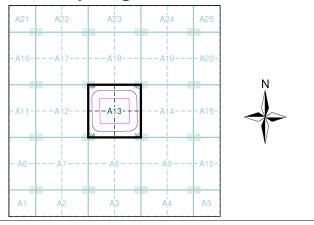
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

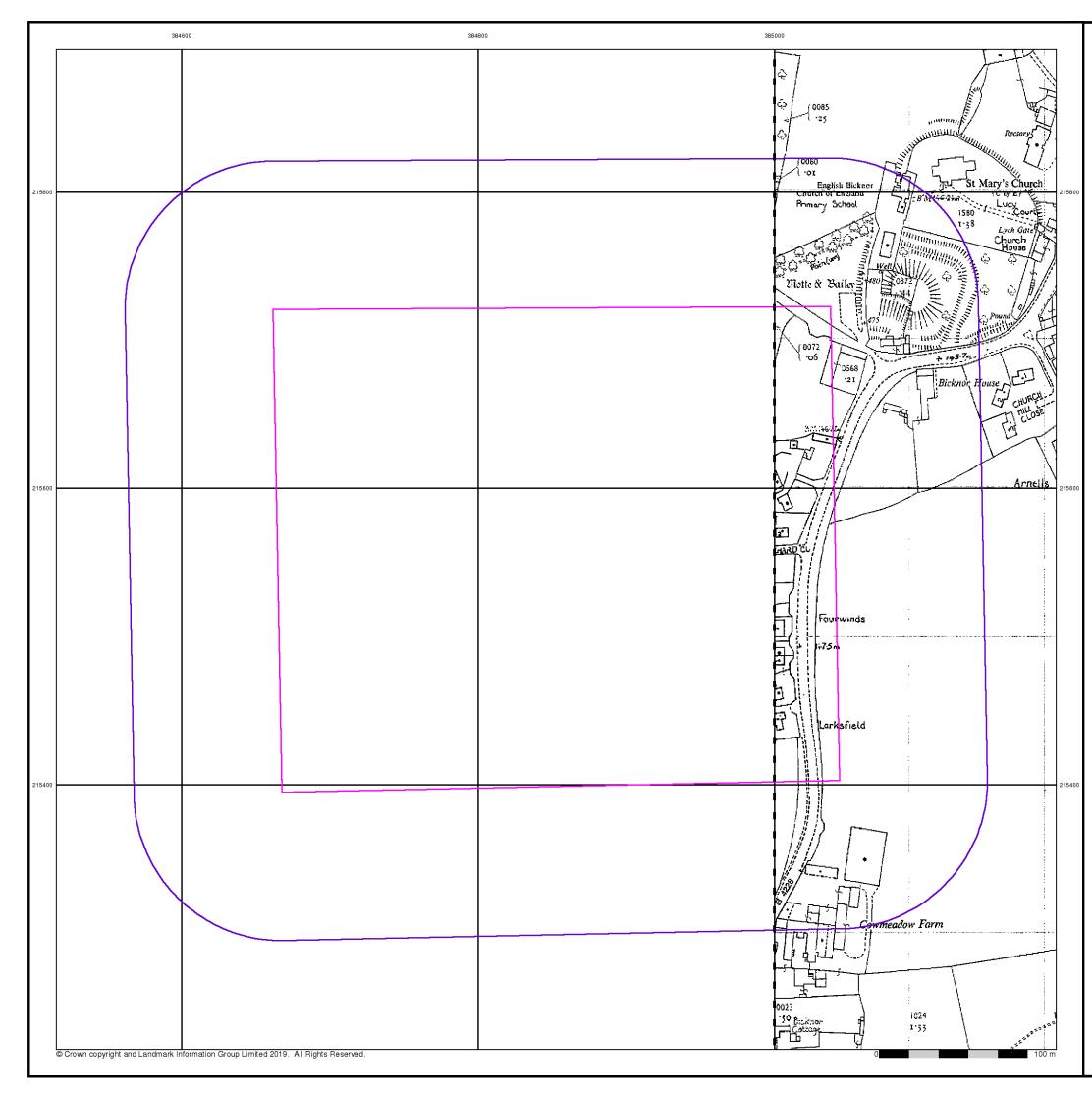


Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	A
Site Area (Ha):	12.15
Search Buffer (m):	100

Site Details





Envirocheck[®] • LANDMARK INFORMATION GROUP*

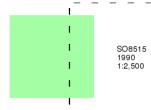
Additional SIMs

Published 1990

Source map scale - 1:2,500

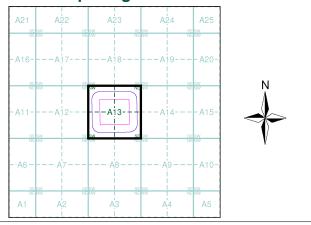
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Т

Historical Map - Segment A13

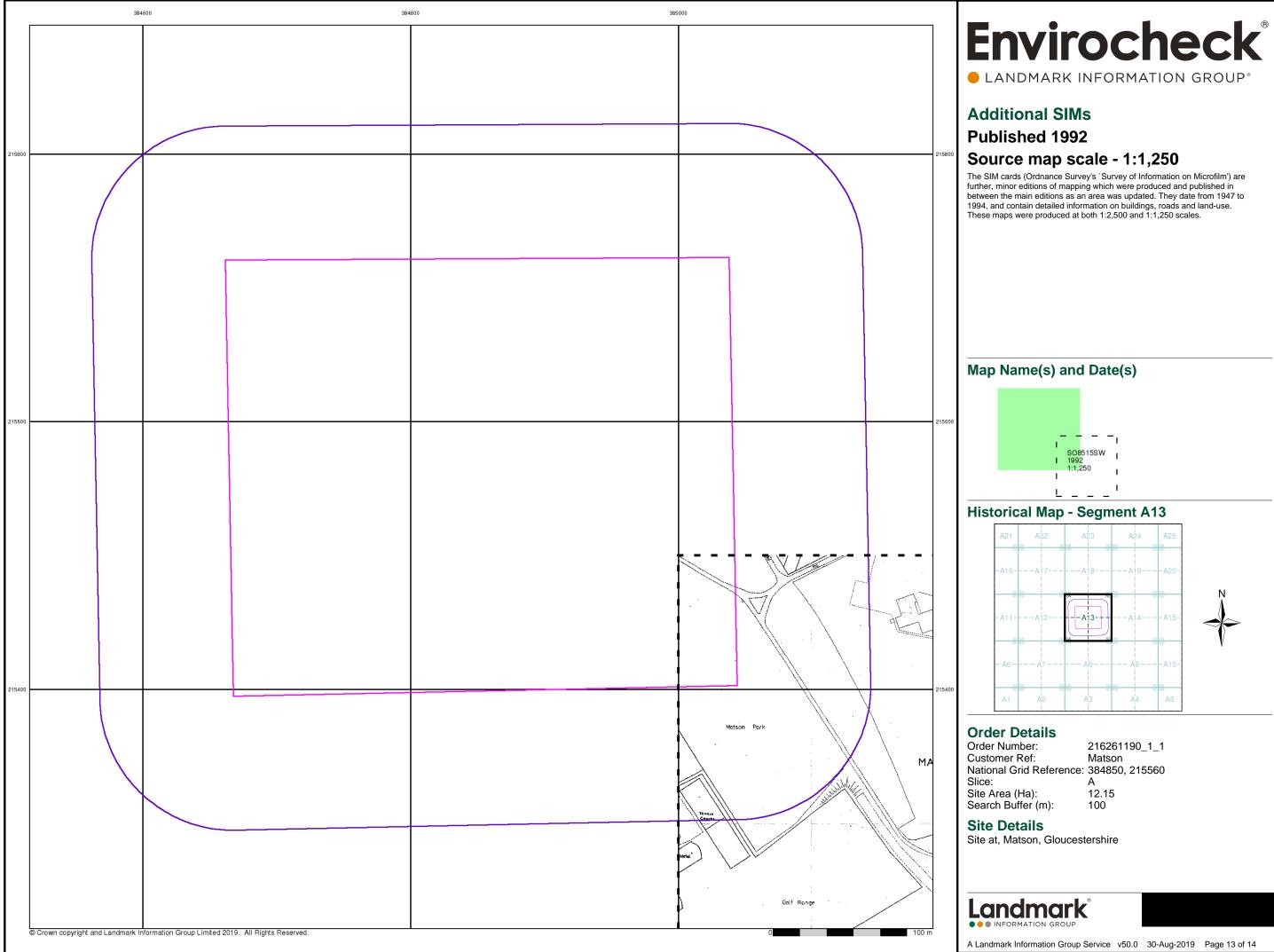


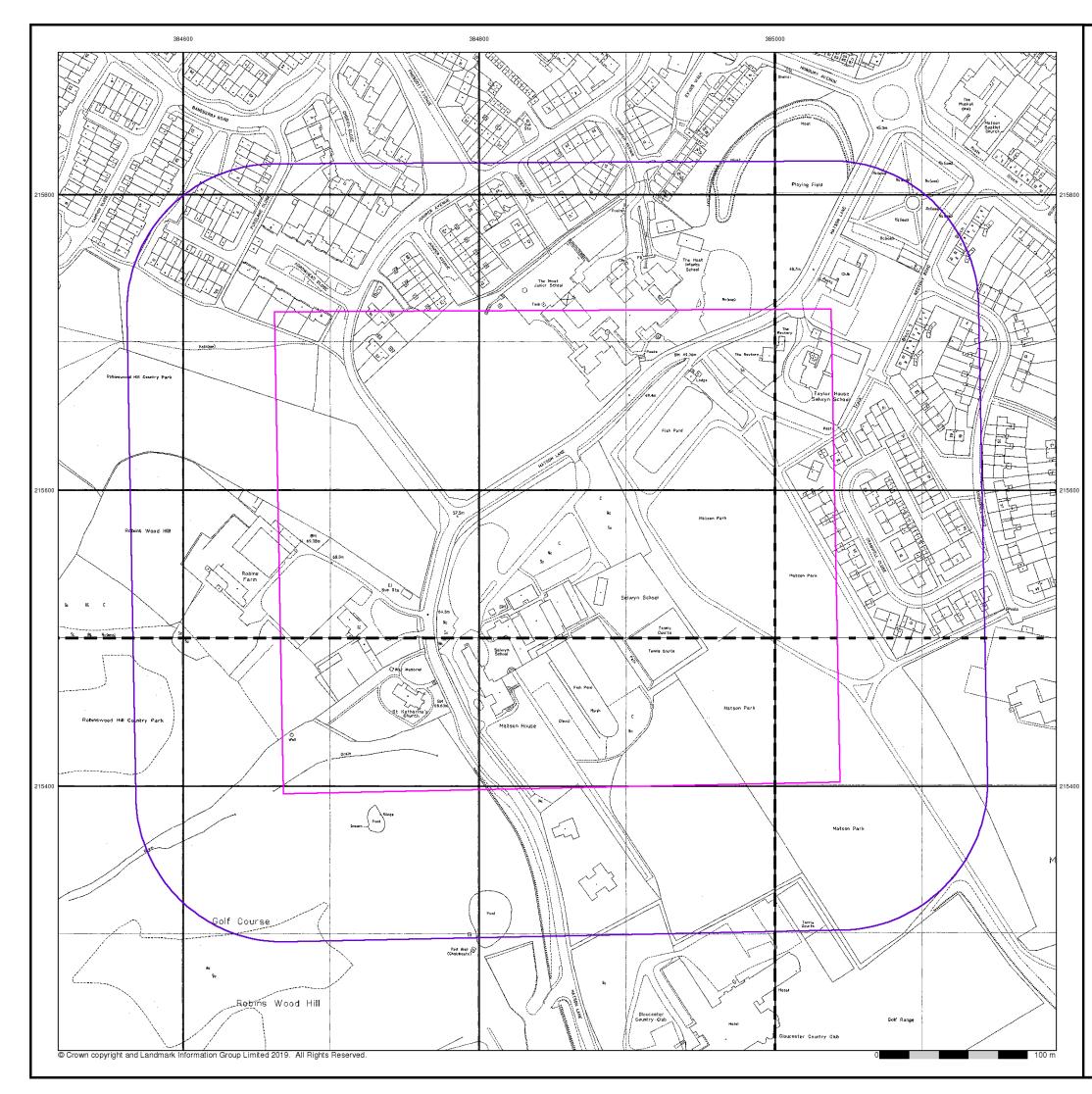
Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	A
Site Area (Ha):	12.15
Search Buffer (m):	100

Site Details







Envirocheck[®] • LANDMARK INFORMATION GROUP[®]

Large-Scale National Grid Data Published 1994

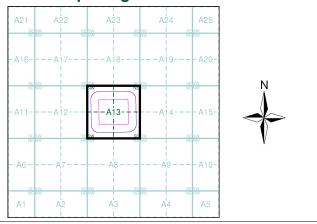
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

_				_
ł	SO8415NE		515NW	I
I	1994 1:1,250	1994 1 1:1,2		I
I		I.		I
-				_
1	SO8415SE	I _{SO8}	515SW	Т
I	1994 1:1,250	1994 1 1:1,2	4	ı
I I		1994 1 1:1,2	4	1 1

Historical Map - Segment A13



Order Details

Order Number:	216261190_1_1
Customer Ref:	Matson
National Grid Reference:	384850, 215560
Slice:	A
Site Area (Ha):	12.15
Search Buffer (m):	100

Site Details





Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

Exeter Office

Unit 1, Clyst Units Cofton Road Marsh Barton Exeter EX2 8QW

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive, Stonebridge Milton Keynes Buckinghamshire MK13 0AT

Suffolk Office

Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ





School Lodge, Matson, Gloucester

Landscape and Visual Appraisal

Prepared by: The Environmental Dimension Partnership Ltd

On behalf of: Gloucester City Homes

March 2022 Report Reference edp5305_r002d

Contents

Section 1	Introduction, Purpose and Methodology	1
Section 2	Landscape Appraisal of the Site and Its Surroundings	5
Section 3	Policy Review and Findings of EDP Data Trawl	9
Section 4	The Proposed Development	13
Section 5	Landscape and Visual Appraisal	15
Section 6	Discussion and Opinion	23

Appendices

Appendix EDP 1	Glossary of LVIA Terms
Appendix EDP 2	Assessment Methodology
Appendix EDP 3	Proposed Site Layout and Elevations (Quattro Design Architects 5591-P-1000, Rev H, Feb 2020 and 5591-P- 7000, Rev D, Sept 2020)
Appendix EDP 4	Detailed Soft Landscape Drawing (edp5305_d004e 22 March 2022 JG/BC)

Plans

Plan EDP 1	Environmental Planning Context (edp5305_d002a 05 September 2019 BC/BC/GY)
Plan EDP 2	Findings of Visual Appraisal (edp5305_d003a 05 September 2019 BC/BC/GY)

Photoviewpoints

(edp5305_d001b 05 September 2019 JTF/BC/GY)

Photoviewpoint EDP 1	View the site entrance, looking south-east
Photoviewpoint EDP 2	View from Matson Lane, looking south
Photoviewpoint EDP 3	View the site entrance, looking north-west

Photoviewpoint EDP 4	View from PRoW No. 39 within Matson Park, from the southern boundary of the site looking north			
Photoviewpoint EDP 5	View from the south-western boundary of the site looking north-east			
Photoviewpoint EDP 6	View from the south-eastern edge of the Matson Anglers pond, looking north-east			
Photoviewpoint EDP 7	View from the western end of the Matson Anglers pond, looking north-east			
Photoviewpoint EDP 8	View from Matson Park, looking north-east			
Photoviewpoint EDP 9	View from Matson Park, looking north			
Photoviewpoint EDP 10	View from ProW No. 39 within Matson Park, adjacent to the rear boundary of properties on Cranwell Close, looking north-west			

This version is intended for electronic viewing only

	Report Ref: edp5305_r002			
	Author	Formatted	Peer Review	Proofed by/Date
002_DRAFT	BC	CM	DL	-
002a_DRAFT	BC	ER	-	-
002b	BC	-	BC	HF 040919
002c	BC	CL	-	-
002d	BC	-	-	SC 240322

This page has been left blank intentionally

Section 1 Introduction, Purpose and Methodology

Introduction and Purpose

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been commissioned by Gloucester City Homes to undertake a Landscape and Visual Appraisal (LVA) of the proposals at School Lodge, Matson, Gloucester ('the site') to inform planning proposals for detailed planning permission.
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cheltenham, Shrewsbury and Cardiff. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).
- **1.3** The proposed development (refer to **Appendix EDP 3**) is for the construction of ten affordable housing units, landscaping and associated works. The location of the site is shown on **Plan EDP 1**.
- 1.4 With reference to **Plan EDP 1**, and **Image EDP 1.1** below, the site comprises existing developed land, including the derelict School Lodge, its rear garden with mature planting, a car park to the north-west, and an area of Public Open Space (POS) within Matson Park comprising footpath routes and tree planting to the south-east. The POS is accessible via a public footpath from Matson Lane and through the car park. Mature trees line the northern boundary of the site and Matson Pond bounds the site to the south-west.
- 1.5 The determining Local Planning Authority (LPA) is Gloucester City Council (GCC).



Image EDP 1.1: Aerial image of the site and approximate site boundary (Source: ©2019 Google)

- 1.6 This report sets out the findings of the LVA for the site and the proposed scheme subject to this planning application. Specifically, EDP's work has included the following key items:
 - A review of the planning documentary context for the site;
 - A desktop study and web search of relevant background documents and maps. EDP's study has included reviews of aerial photographs, web searches, Local Planning Authority (LPA) publications and other landscape character assessments. We have also obtained where possible, information about relevant landscape designations such as National Parks, Areas of Outstanding Natural Beauty (AONB), and Registered Parks and Gardens (RPG);
 - A field assessment of local site circumstances, including a photographic survey of the character and fabric of the site and its surroundings. The field assessment was undertaken by a Chartered Landscape Architect on 01 March 2019; and
 - An analysis of the likely landscape and visual effects arising from the proposed scheme as set out in the application drawings, combined with informed professional judgements about the effects arising, based on their nature (positive or negative), magnitude and the sensitivity of the receiving environment.

Methodology Adopted for the Assessment

- 1.7 Owing to the limited scale of the proposal, and notwithstanding the requirement to undertake the LVA in line with the correct guidance as issued by the Landscape Institute, the methodology (provided in **Appendix EDP 2**) represents an abridged version of the full methodology used by EDP for larger sites.
- 1.8 Following the pre-application response received from GCC, the development for the site has evolved over time, with inputs from the applicant's consultant team, including EDP. Consistent with the landscape led approach, EDP's landscape team has provided advice during 2019 as part of this LVA process. EDP's role was to recommend alterations to the masterplan in order to mitigate impacts on the landscape character and visual amenity of Matson Park. EDP has therefore undertaken an independent assessment regarding the suitability of the site in landscape terms to accommodate development and to inform the emerging development proposals.
- 1.9 Essentially, this appraisal identifies, describes and evaluates the effects at those landscape and visual receptors likely to be subject to an effect, based upon the proposals being considered and the context of the landscape and visual resource surrounding the site. The baseline section provides the description of those receptors identified following the desktop appraisal and site visit, whilst the following section provides the appraisal.

This page has been left blank intentionally

Section 2 Landscape Appraisal of the Site and Its Surroundings

- 2.1 The northern area of the site is located within and accessed from the urban context of Matson, on the northern edge of Matson Park within an area that forms an indent into the settlement edge. The frontage of the site on to Matson Lane is open, as illustrated in **Image EDP 2.1**, with the view looking into the site illustrated in **Image EDP 2.2** below.
- 2.2 The south-eastern side of the site forms an area of open space, functioning as part of the wider Matson Park, being integrated into it by the footpath network and trees, i.e. forming part of the multifunctional green infrastructure of the park. The young mature block tree planting within this area is assessed to be of low value (Category C) within the arboriculture report by B J Unwin Forestry Consultancy, requiring some management to thin out weak specimens, but does provide a designed planting feature within this entry area into the park.
- 2.3 This area of open space within south-eastern areas of the site clearly does not perform a function in terms of sports or children's recreational provision. However, the presence of planted groups of young mature trees and footpaths within the site may be considered to form a secondary function in respect of green infrastructure (a planned network of multifunctional green spaces and interconnecting links) and a designed park. Matson Pond, as a water feature, is also considered to form a secondary function within the park in terms of forming part of the wider green infrastructure network.
- 2.4 The north-west section of the site is existing developed land which extends away from the main areas of the park, being perceptually divorced from it by mature landscape scrub and tree cover. School Lodge, seen below in **Image EDP 2.1**, adds an historic element to the immediate urban context, although it is in poor condition due to its derelict state. The overgrown vegetation within the rear garden and mature trees in this part of the site do contribute to the well-treed green context of the northern end of the Matson Park, however, it is only the two mature ash trees that would be considered to be of some value (moderate value according to the arboricultural report). The rear garden vegetation does provide a green backdrop to the northern end of Matson Pond, separating it visually from the car park.
- 2.5 With regard to the immediate context, the site is accessed from Matson Lane which, although being well-treed, is largely urban in character and provides access to the residential areas of Matson and Abbeydale to the north. Immediately to the north-west of Matson Lane and the site, an entrance into Moat Primary School is framed by tall security fencing which further urbanises the immediate context. Views into the wider Matson Park are generally limited by mature tree cover surrounding the Matson Anglers pond, although some viewing opportunities may be possible during winter months. The presence of School Lodge within the site, and its associated boundary treatments, serves to prevent any intervisibility from the site entrance to the wider Matson Park.

- 2.6 To the south-east of the site, the existing settlement edge of Matson, at the edge of Matson Park, is characterised by visible domestic boundary treatments which detract from the character of this area of the park, as illustrated in **Photoviewpoint EDP 7**. However, this is an urban park that is surrounded by residential development and school grounds and therefore, urban influences are expected. Taylor House to the north is strongly filtered by the mature trees and vegetation on the northern boundary of the site, which enclose that area of the park.
- 2.7 Following a review of Gloucestershire County Council's online mapping service, a Public Right of Way (ProW) is shown to follow the northern boundary of the site and Matson Park, between Matson Lane and Red Well Road, as illustrated on **Plan EDP 1**. The route within the site is overgrown and a timber chicane (in need of repair) has been installed at the back of the car park area adjacent to the School Lodge garden boundary; park users cross the car park to enter the park through this secondary access from Matson Lane. A further secondary access into the park from Rectory Road enters the site from the east, although the main access into this end of the park is to the west of School Lodge and outside the site.
- 2.8 Given the location of the site within an urban context, in combination with mature tree cover, as is to be expected, views of it are extremely limited. For the most part, views are limited to receptors within the immediate context, which includes road users and pedestrians on Matson Lane, visitors to the Matson Anglers pond, visitors to Moat Primary School, ProW users within the northern extents of Matson Park and adjacent residential properties, although private views are likely to be limited to winter months only.





Image EDP 2.1: View looking south along Matson Lane, illustrating the open site frontage and the enclosure of School Lodge



Image EDP 2.2: View looking into the site from the entrance on Matson Lane



Image EDP 2.3: View looking from the eastern corner of the site, illustrating the ash tree copse within the eastern areas

This page has been left blank intentionally

Section 3 Policy Review and Findings of EDP Data Trawl

3.1 An appreciation of the 'weight' to be attributed to any landscape or visual effects arising from development starts with an understanding of the planning context within which any such development is to be tested for its acceptability. The site falls within the Gloucester City Council (GCC) LPA administrative boundary.

Planning Policy Baseline

National Policy

- 3.2 The National Planning Policy Framework (NPPF) (February 2019), includes planning policies and guidance requiring developers to respond to the natural environment and landscape character, integrating the development into its local surroundings.
- 3.3 Section 12 of the NPPF addresses the issue of good design and recommends that planning decisions should aim to ensure that developments respond to the local character and history. Specifically, in paragraph 127 it is stated that development should "add to the overall quality of the area...", are "visually attractive as a result of good architecture, layout and appropriate and effective landscaping...", and "be sympathetic to local character and history, including the surrounding built environment and landscape setting...".
- 3.4 Section 15 of the NPPF addresses the natural environment. For landscape, this means *"recognising the intrinsic beauty of the countryside"* and balancing any 'harm' to the landscape resource with the benefits of the scheme in other respects. This balancing exercise is to be undertaken by the decision taker (in this case the LPA) and falls outside the remit of this report.

Local Policy

Gloucester, Tewkesbury and Cheltenham Joint Core Strategy

- 3.5 The relevant planning policy at a local level is contained within the Gloucester, Tewkesbury and Cheltenham Joint Core Strategy (JCS), which was adopted in December 2017. The JCS contains the following policies relevant to landscape and visual matters:
 - **Policy INF3: Green Infrastructure** states that "Existing green infrastructure will be protected in a manner that reflects its contribution to ecosystem services (including biodiversity, landscape/townscape quality, the historic environment, public access, recreation and play) and the connectivity of the green infrastructure network";

- **Policy SD4: Design Requirements** states that development should "respond positively to, and respect the character of, the site and its surroundings, enhancing local distinctiveness, and addressing the urban structure and grain of the locality", and that "It should be of a scale, type, density and materials appropriate to the site and its setting"; and
- Policy SD6: Landscape requires development proposals to "protect landscape character for its own intrinsic beauty". Further, policy text states that proposed development "will have regard to the local distinctiveness and historic character of the different landscapes in the JCS area, drawing, as appropriate, upon existing Landscape Character Assessments and the Landscape Character and Sensitivity Analysis. They will be required to demonstrate how the development will protect or enhance landscape character and avoid detrimental effects on types, patterns and features which make a significant contribution to the character, history and setting of a settlement or area."

Background Documents

Gloucester Open Space Strategy 2014 - 2019

- 3.6 Matson Park is referred to as 'Area MR5' within the Open Space Strategy and is described as containing recreational facilities including a Local Equipped Area for Play (LEAP), adult football and rugby pitches and a multi-use games area. In terms of the wider park, it is described as comprising mainly short mown grass with associated trees, shrubs and hedgerows. The Matson Pond is not referenced as a recreational resource in the document, although signage on site indicates that it is used for fishing by the Matson Anglers. The open space 'types' that are relevant to Matson Park are Type J 'Sports Provision', Type H 'Spaces for Children and Young people', Type E 'Green Infrastructure' and Type A 'Parks and Gardens'. The park is not identified in the strategy document as one of the key sites and priorities.
- 3.7 In terms of the Open Space Strategy, which acknowledges an overprovision within the ward of 10.98 hectares (ha), it is noted that one of the aims is to "*identify potential new sites for tree planting and habitat improvements*" within amenity green space.
- 3.8 The Open Space Strategy states that there is an under provision of sports pitch provision and formal plan, with one of the objectives being "to ensure policies are put in place in the council's City Plan **to protect open space** and private playing fields and to help to negotiate open space in housing development."

Relevant Designations and Considerations

3.9 A review of relevant designations that may affect the value of the landscape in designatory terms and how the landscape is appreciated are reviewed below and shown on **Plan EDP 2**:

- The site is located within the northern extents of Matson Park which is described as 'Area MR5' within the Gloucester Open Space Strategy;
- A ProW follows the north-eastern boundary of Matson Park, following the rear boundary of properties on Cranwell Close before running through the site to Matson Lane;
- The Matson moated site Scheduled Monument is located in close proximity to the north of the site, although visually divorced from it;
- Although there are a number of Listed Buildings within the wider context, owing to the well-treed character of Matson Park, there was not found to be any intervisibility between any Listed Building and the site; and
- There are no Conservation Areas within 1km of the site and none with any intervisibility with the site.
- 3.10 It is not the function of this LVA to specifically assess the effects on the setting of Conservation Areas, ecological and/or heritage assets. Nonetheless, the presence of these features can add to the value of the landscape as well as having value in their own right. This appraisal seeks to obtain an understanding of heritage features only insofar as they contribute, or give an insight into, the character and value of the landscape of the site and its context.

Summary

- 3.11 Local planning policies contain a number of overarching policies of relevance to this study. The main themes of these policies, against which the proposed development could be tested, have been summarised here for convenience:
 - Development for proposals should positively respond to the character of the site and its surroundings;
 - Development proposals should retain and manage landscape features that contribute to wider landscape character and the setting of development in order to protect the intrinsic beauty of Matson Park;
 - The location, materials, scale and use of any proposed development should be sympathetic to and complement local landscape character; and
 - Development proposals should consider the landscape and visual sensitivity of the area, including views from ProW.

This page has been left blank intentionally

Section 4 The Proposed Development

The Proposed Development

- 4.1 With reference to the proposed development (see **Appendix EDP 3**), and the Detailed Soft Landscape Scheme (see **Appendix EDP 4**), the scheme comprises the following:
 - The construction of ten affordable housing units;
 - The retention and enhancement of School Lodge;
 - Access to be provided from Matson Lane;
 - Retention of mature tree cover within the south-eastern areas of the site; and
 - Proposed tree planting and areas of new structural landscaping.

Designed, or Embedded, Mitigation

- 4.2 The findings of EDP's early and ongoing field appraisals have been fed into the evolving proposals in order to ensure that the masterplan is 'landscape led'. Accordingly, the proposal incorporates designed and embedded mitigation in six key respects:
 - As set out on the Proposed Site Layout (see **Appendix EDP 3**), with the exception of two poor quality ash trees within the centre of the site, existing mature tree cover within the site, particularly those with a stronger contribution to the wider character of Matson Park, are to be retained;
 - New landscape features are proposed to the south-east of the School Lodge along the existing garden boundary to mitigate harmful effects on the landscape character setting and visual amenity of Matson Pond;
 - 3) Incorporating a landscape buffer along the south-west boundary of the site, comprising native species hedgerow/shrub and tree planting to enhance biodiversity and in the long-term offer mitigation for existing tree loss. A landscape buffer would improve the quality of the landscape and strongly filter views of the proposed development from within the wider park, protecting visual amenity in the longer term;
 - 4) Incorporating tree planting at the entrance to the site off Matson Lane to mitigate the loss of the existing trees;

- 5) A defined pedestrian route is to be retained through the site, retaining a link between Rectory Road and Matson Lane. The character of the route would be enhanced with an improved condition from its existing degraded state, improving pedestrian connectivity and the legibility of entrances into Matson Park; and
- 6) The landscape strategy would include native plant species of local provenance and characteristic of the local landscape character to enhance the landscape and ecological value of the proposed development green infrastructure.
- 4.3 A detailed soft landscape scheme is included at **Appendix EDP 4**.

Section 5 Landscape and Visual Appraisal

Introduction

- 5.1 The assessment of effects on landscape and visual amenity is aided through consideration of a series of illustrative viewpoints. The viewpoints have been selected to be representative of the visual sensitivities of the study area and publicly accessible locations in the general vicinity of the site from which clear views of the development may be obtained. The viewpoint locations are shown on **Plan EDP 2**.
- 5.2 Representative viewpoints (or Photoviewpoints) are presented in **Table EDP 5.1**.

No.	Location	Grid Reference	Distance to Site	Reason for Selection
1	View the site entrance, looking south-east	384965, 215694	Within site	Demonstrates views experienced by ProW users travelling through the site.
2	View from Matson Lane, looking south	384958, 215702	c.10m	Illustrates views experienced by receptors travelling on Matson Lane.
3	View the site entrance, looking north-west	385032, 215647	Within site	Demonstrates views experienced by ProW users travelling through the site from the east.
4	View from ProW No. 39 within Matson Park, from the southern boundary of the site looking north	385002, 215624	Adjacent to the southern boundary of the site	Illustrates views experienced by ProW receptors from the wider Matson Park to the south.
5	View from the south-western boundary of the site looking north-east	384979, 215640	c.10m	Illustrates views experienced by receptors from the wider Matson Park to the south.
6	View from the south-eastern edge of the Matson Anglers pond, looking north-east	384948, 215631	c.40m	Illustrates views experienced by receptors in close proximity to the Matson Anglers pond.
7	View from the western end of the Matson Anglers pond, looking north-east	384900, 215623	c.75m	Illustrates views experienced by receptors in close proximity to the Matson Anglers pond.
8	View from Matson Park, looking north-east	384915, 215589	c.85m	Illustrates views experienced by receptors from the wider Matson Park to the west.
9	View from Matson Park, looking north	384978, 215514	c.110m	Illustrates views experienced by receptors from the wider Matson Park to the south.

 Table EDP 5.1: Selected Representative Viewpoints

No.	Location	Grid	Distance	Reason for Selection
		Reference	to Site	
10	View from ProW No. 39 within Matson Park, adjacent to the rear boundary of properties on Cranwell Close, looking	385073, 215489	c.150m	Illustrates views experienced by receptors from the wider Matson Park to the south.
	north-west			

Technical Productions

5.3 To aid the assessment, a Zone of Theoretical Visibility (ZTV) diagram was produced as part of the process of defining the LVA study area. However, given the urban context of the site, in combination with mature tree cover within the northern areas of Matson Park, the accuracy of any desktop analysis is limited. As such, a site visit was carried out on 01 March 2019 by a Chartered Landscape Architect from EDP's landscape team. Through this exercise, the main visual receptors predicted to have actual visibility to the site were identified and the Zone of Primary Visibility (ZPV) was established. As can be seen on **Plan EDP 2**, supported by **Photoviewpoints EDP 1** to **10**, in many areas around the site, views of the development would be either completely or partially screened by hedges, trees and buildings within Matson and Matson Park.

Effects Upon the Landscape Resource

- 5.4 Effects upon the landscape resource are concerned with those effects upon landscape fabric, landscape character and landscape designations at a national, regional or local level. For the proposed development at the site, and in response to the relatively small scale of the proposals and planning policy, the following receptors have been identified as having the potential to experience effects:
 - The character of the site and its context; and
 - The landscape fabric, including trees, hedgerows and amenity grassland in the immediate vicinity of the site.

Effects Upon Landscape Character

5.5 Given the site's location within the urban context of Matson, few landscape character assessments are of relevance, with GCC's more detailed assessment being the Landscape Characterisation and Sensitivity Analysis which focusses on 'urban fringe areas' according to the JCS. As such, there are no published local (county or district) landscape character assessments covering the site and its urban context. A Townscape Character Assessment is being prepared according to the Council's website, but at the time of preparing this LVA it had not been published. Therefore, there are no published assessments to inform an assessment of impacts on landscape character of

Matson Park. A site level description and assessment of landscape character has been undertaken for the landscape context of the site and Matson Park in accordance with published guidance.

- 5.6 The Gloucester Open Space Strategy provides some commentary relating to Matson Park, in that it "was once part of the gardens of a large house and Sneedham's Green is an area of traditional village green/common land, which is grazed by a flock of free roaming sheep." With regard to Matson itself, the Open Space Strategy reinforces the urban context of the site, stating that "Matson and Robinswood ward is a mainly residential ward of predominantly 20th century housing development, plus schools, community facilities and some retail and commercial premises."
- 5.7 As illustrated by **Plan EDP 2**, the site is located within the northern extents of Matson Park, with late 20th Century residential properties immediately to the south-east. The proposed development is largely limited to the central and north-western areas of the site which is existing developed land that extends away from the main areas of the park, being perceptually divorced from it by mature landscape scrub and tree cover. This area, although forming part of the wider park in a planning sense, does not represent in a perceptual or physical sense a landscape of any great importance or character; it essentially forms part of the urban context of Matson Lane. The south-eastern area of the site, however, contains a number of mature trees which are to be retained; particularly as they are considered to provide a contribution to the well-treed character of the wider Matson Park.
- 5.8 Given the site's use, there are few landscape features of note within the northern areas, with mature tree cover within the southern areas of the site which provide a contribution to the wider character of Matson Park being retained. The northern areas of the site contain landscape receptors which are in poor condition, generally being of low sensitivity. However, on balance, the value of the site and its context, in landscape terms, is considered to be medium which, when considered against a medium susceptibility to change, the landscape character of the site is considered to be of **medium** overall sensitivity. This relates to the character of the site itself and also the immediate surroundings or context, i.e. the areas where landscape character effects are most likely.
- 5.9 The introduction of built form within the site, as proposed, with consideration of recent 20th Century development within the local context and larger scale built form to the north (Taylor House), would not be deemed to be either out of context or an uncharacteristic feature within the local area. The proposed development would largely be seen within the context of existing built form in close proximity to the site, although benefiting from visual enclosure afforded by mature tree cover within and around the site. Views towards the proposed development from footpaths around the fishing pond and northern areas of Matson Park would be filtered to a degree by trees within the local context. In addition, new tree planting at the south-western boundary of the site would provide a beneficial contribution to the well-treed context of the wider park and the immediate context of the pond. Where views are possible, the proposed development would be seen as being similar in character to existing built form seen within local views; including the School Lodge and existing development edge to the south-east of the site.

- 5.10 The retention and enhancement of the School Lodge from its current degraded state would serve to improve the immediate character of Matson Lane and to the northern access of the Park from the site, including its relationship with the Matson Anglers pond, although this would be balanced by the adverse effects of the inclusion of new built form, albeit within a largely urbanised context. A pedestrian access into the park, being accessed immediately to the north of School Lodge, would be retained and enhanced.
- 5.11 At Year 1, the magnitude of change to the character of the site and its context would be medium, yielding a moderate/minor adverse effect due to the addition of elements that are evident but do not necessarily conflict with the key characteristics of the existing landscape, particularly owing to the nature of residential built form surrounding the site to the east and south-east. Within the site, there will be an alteration to the characteristics, and some alteration to key landscape features at key access points into the site. However, the proposed development includes beneficial effects through the addition of new tree planting within the northern areas to buffer the existing retained landscape elements, and through the retention of existing mature tree cover within the southern areas of the site.
- 5.12 Although the proposed development would require the loss of two semi-mature ash trees (T29 and T31) from within the site, the loss would only be noticeable within the immediate context and would be a barely perceptible change from the main body of the park, including areas around the Matson Anglers Pond. With the consideration of new planting measures within the site, the nature of the effect would largely be beneficial through the improvement to the condition and character of the northern areas of the site, which itself is found to extend away from the main areas of the park with a largely urbanised character.
- 5.13 With the exception of the loss of the existing ground cover within the site, the proposals give rise to the potential for beneficial effects on landscape features through the retention, enhancement and addition of trees and hedgerows within the site. The development would make a positive contribution to the local landscape context, including Matson Park, through the provision of new boundary planting at the south-western edge of the site, replacing poor quality scrub that is there at present. The perceptual change to the character of the site and its contexts would be limited to the immediate context, generally only perceived from receptors at the site boundary.
- 5.14 As such, through the maturation of new landscape features within the site, the magnitude of change at Year 15 is likely to reduce to low, yielding a **minor** beneficial effect, with some adverse elements, on the site and its context. It is also the case that there are very few, if any, publicly accessible locations where the change in usage of this discrete area of landscape would be apparent. The valuable boundary hedgerows and trees would be retained, buffered, strengthened and better managed, with additional planting measures to assimilate the proposed development into its setting, particularly in maintaining the perceived well-treed character of the northern areas of Matson Park. In this context, not only are the long-term effects minor, they would generally only be experienced by receptors on immediately to the north of the site on Matson Lane, with the change being barely perceptible from within the wider park.

Effects on Visual Amenity

- 5.15 Visual effects relate to changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes and to the overall effects with respect to visual amenity. Effects upon these receptors are derived through the changes to the views experienced and through this the change to the overall visual amenity of the study area, as brought about by the proposed development. Following EDP's site appraisal, the following receptors are considered within the assessment:
 - Users of ProW within the immediate vicinity of the site, namely ProW No. 39;
 - Users of the surrounding road network, including pedestrians;
 - Visitors to local facilities, including the adjacent school and anglers' pond; and
 - Residents of properties in close proximity to the site.

General Visibility

5.16 As a consequence of the site's location, within the urban context of Matson, it was found that only very limited intervisibility between the site and publicly accessible areas (visual receptors) was available. In most cases, it was found the receptors with views of the site are in close proximity, or immediately adjacent, to the site. However, these Photoviewpoints do not represent the only areas from which there will be an effect, rather they provide a representative assessment, which is used as a benchmark to understand the wider potential effects as discussed below. The locations of the Photoviewpoints are while the Photoviewpoints are shown on Plan EDP 2, illustrated at Photoviewpoints EDP 1 to 10 at the rear of this document.

Visual Effects

5.17 Based upon the views illustrated in **Photoviewpoints EDP 1** to **10**, this section provides a review of the potential visual effects that may arise from the proposals. Views of the site from surrounding publicly accessible viewpoints would in all instances be minimal, and in many cases barely perceptible.

ProW Users

5.18 Given the urban context of the site, in combination with mature tree cover within Matson Park, the greatest potential for effects on ProW users is largely limited to a single ProW running along the edge of Matson Park before crossing the site to Matson Lane. As shown in **Photoviewpoints EDP 4** and **10**, which illustrate views experienced by ProW receptors travelling north towards the site. Local views are characterised by mature tree cover within Matson Park and late 20th Century two-storey residential development, with varying boundary treatment types which serve to detract from the intrinsic beauty of the Park. Although the presence of such domestic boundary treatments would serve to

reduce the susceptibility of change of receptors using this route, owing to a sense of openness afforded by Matson Park, the sensitivity of ProW users is considered to be high.

- 5.19 For the most part, views experienced from ProW No.39, illustrated by **Photoviewpoint EDP 10**, are heavily filtered by mature tree cover with close proximity views of urban form being seen as a visual detractor. However, during construction there is potential for high level construction activities to be seen. Lower level construction activities within the site would not be seen due to intervening landform and vegetation. On completion, there is unlikely to be any notable change to the view, as glimpsed views of the proposed development may be possible but would be seen in the context of existing built form.
- 5.20 Owing to the well-treed character of the park, an appreciation of the site is only experienced in close proximity to it, illustrated by Photoviewpoint EDP 4. From here, several man-made features are seen within local views, although mature tree cover within the southern areas of the site provide a visual connection to the wider areas of Matson Park. Due to the proximity of the receptor to the site, and the open boundary to the southern boundary, receptors here would experience views of all construction activities. However, on completion the aesthetic qualities of the proposed built form would be considered to simplify and improve visual amenity through improvements in the overall condition of the site, with the long-term character reflecting that of the immediate context and therefore giving rise to both adverse and beneficial effects. Mature tree cover within the southern areas of the site is to be retained, with tree planting within the northern areas reinforcing the well-treed character of the site's immediate setting. The change proposed would be considered 'in character', resulting in a low magnitude of change and giving rise to a moderate/minor neutral effect on these high sensitivity receptors.

Road Users (Including Pedestrians)

- 5.21 Views experienced by road users are limited to those travelling along a short section of Matson Lane, as illustrated in **Photoviewpoint EDP 2**. Road users within this context are considered to be low sensitivity receptors as the focus of the view on this busy route is not necessarily directed at the site or its context. Users of this route are likely to be travelling to a destination, work, shopping or entertainment centres, rather than to take in the view.
- 5.22 While it is considered that the construction works and proposed development would be seen in short-distance views, the proposals will not significantly alter the character of views experienced by receptors using the local road network in a general sense. During construction, it is considered that views for road users would not change fundamentally. On completion, on account of the change proposed, the change to the view would be minimal as such change would be considered 'in character' with existing viewing experiences from the north. In addition, the retention and enhancement of the School Lodge within the site, being an improvement from its current degraded state, would improve both the immediate streetscene and the entrance to the park from the north. Considering the low sensitivity of road users, and a magnitude of change being low

at most, the overall effect is considered to be no greater than **minor/negligible** and neutral.

Other Receptors

- 5.23 Visitors to facilities in close proximity to the site include visitors to a local school, namely Moat Primary School, and visitors to Matson Anglers pond, both of which are located either within, or in close proximity to, an urban setting. However, the influence of mature tree cover within the northern areas of Matson Park serves to afford visual enclosure and the softening of local views. Here, particularly owing to the visual screening afforded by mature tree cover within the northern areas of Matson Park, receptors are likely to include people engaged in outdoor sport other than appreciation of the landscape and where views of the landscape have little or no importance. Overall, due to their passing interest in their surroundings as they approach and visit their destination, and relatively short period of time and infrequency that the view is experienced by the receptors.
- 5.24 Visitors to Moat Primary School would experience similar views to road users on Matson Lane (illustrated in **Photoviewpoint EDP 2**) as they arrive at and leave their destination. Here, construction activities and proposed built form within the site would be seen in short distance views. However, on account of the change proposed, the change to the view would be minimal as such change would be considered 'in character' with existing viewing experiences from the north. In addition, the retention and enhancement of the School Lodge within the site, being an improvement from its current degraded state, would improve both the immediate streetscene and the entrance to the park from the north. Considering the medium sensitivity of visitors to Moat Primary School, and a magnitude of change being low at most, the overall effect is considered to be no greater than **minor** and neutral.
- 5.25 Similar views are experienced from the Matson Anglers Pond (illustrated in Photoviewpoints EDP 7 and 8), although views here benefit from visual enclosure created by mature tree cover within the immediate context which serves to partly divorce the pond from Matson Lane. As illustrated, existing views include existing built form, namely 20th Century residential development to the south-east of the site and School Lodge which is seen in its state of disrepair. In views from the west of the site, due to the proximity of the receptor to the site, views of construction activities would largely be unavoidable, although retained boundary features would serve to filter views to a degree. On completion, while there would be some views of the proposed development from the immediate context to the west of the site, the character of local views is unlikely to change through the addition of built elements of a similar nature to the baseline context, although being seen in closer proximity. In addition, new landscape features at the south-western boundary of the site would positively contribute to the immediate character of the northern areas of the park and the Matson Anglers pond. At both Year 1 and Year 15, the magnitude of change would be medium as the proposed development is likely to be recognised by the receptor, although being a minor constituent of local views and being experienced within a localised setting, giving rise to a moderate/minor and adverse overall effect.

Private Receptors

- 5.26 This appraisal focusses predominantly on views from publicly accessible locations. Views from private residential properties, although likely to be of high to very high sensitivity to changes in the view, are not protected by national planning guidance or local planning policy. Good site masterplanning of the development site, however, has considered the residential visual amenity of domestic dwellings in close proximity to the proposals.
- 5.27 Due to the surrounding urban context, the number of residential properties with views into the site is limited to those properties at the northern end of Cranwell Close to the south-east and, to the north-east, those within Taylor House and The Rectory, all of which benefit from visual screening afforded by mature tree cover during summer months. For the most part, although with the exception of Taylor House which is a large three-storey building with the original house in closer proximity to the site, residential properties are typical of late 20th Century development with regular massing of residential properties within a planned and repetitive spatial arrangement. From these properties, although mature tree cover at the edges of the site would provide some visual screening, short distance views would be possible, particularly from upper storey windows during winter months. Given the enclosed nature of residential boundary treatments appearing to enclose views from ground level to the immediate property extents, and with the benefit of tree cover within the site and at its boundary, the site is not considered to be visible from a main view from the house, i.e. largely being seen from upper storey rear facing windows. As such, when combined with a reduced susceptibility to change given the existing residential context, the overall sensitivity for these residential receptors is considered to be medium.
- 5.28 Owing to the residential nature of the immediate context, the change to the view resulting from the proposed development would not be considered out of character with the current baseline context. However, the proposed development would be considered to be clearly noticeable in these short-distance views although, due to the residential context, residential visual amenity would not be fundamentally altered. On completion, at both Year 1 and Year 15, the magnitude of change is considered to be medium, giving rise to a **moderate/minor** adverse effect on residential visual amenity, being experienced by a small number of residential receptors.

Section 6 Discussion and Opinion

The Development Proposed

- 6.1 This report has reviewed the findings of a LVA of a proposed development at School Lodge, Matson. This report has assessed the likely landscape and visual effects arising from the development, and a number of key conclusions of which can be considered in three general respects, each of which is discussed in turn below, and as follows:
 - In terms of compliance with relevant policy;
 - In terms of the potential effects on the character of the landscape, including consideration of the character of Matson Park; and
 - Effects on visual amenity, including views from local roads, footpaths and surrounding dwellings.

Compliance with Policy

- 6.2 The small scale of the proposed development is such that changes to the landscape as a result of the proposed development are limited to the immediate setting of the site, including Matson Lane. In addition, the planting of new tree stock within the site and the retention and enhancement of the School Lodge would provide a beneficial contribution to the character of the local context, including views experienced by receptors approaching Matson Park from the north. Upon completion, through the retention of the southern areas of the site, which functions as part of the wider Matson Park, the site would continue to "have regard to the local distinctiveness and historic character" as required by Policy SD4: Design Requirements. The proposed development is limited to those areas within the site which are considered to extend away from the main areas of the park, being perceptually divorced from it by mature landscape scrub and tree cover. As such, while it is accepted that there is some inevitable 'harm' resulting from the addition of new built form, due to the small scale of it and limited adverse effects predicted and improvements to School Lodge serving to benefit the character of Matson Lane, the northern access to the park and the Matson Anglers pond, it is not considered that **Policy SD4** should prevent development coming forward.
- 6.3 This appraisal has demonstrated that, due to existing built form and mature landscape features within both the immediate residential setting and the urban context of Matson, the site is well-contained. The proposals aim to do more than minimise the effect on the existing landscape; the masterplan proposals aim to make a positive contribution to the amenity of receptors using Matson Park which extends to the west and south-west of the site, albeit balanced with some viewing opportunities of newly built form. In addition to retaining the best examples of landscape features across the site, the proposals include

the provision of additional landscape measures within the site and on its frontage and at its boundaries; where boundary features would be enhanced and better managed to retain their contribution to the well-treed context within Matson Park. Therefore, it is considered that the proposed development does not offend the aspirations of **Policy SD6: Landscape**.

6.4 **Policy INF3** requires existing green infrastructure to be "protected in a manner that reflects its contribution to ecosystem services". This appraisal has shown that there are few landscape features of note within the northern areas of the site, with only mature tree cover within the southern areas of the site providing a contribution to the wider character of Matson Park. The proposed development is largely limited to the central and north-western areas of the site which is existing developed land that extends away from the main areas of the park, being perceptually divorced from the wider public open space area by mature landscape scrub and tree cover. In this regard, in landscape and visual terms, it is not considered that **Policy SD4** should prevent development coming forward.

Landscape Character

- 6.5 This appraisal has considered the effects of the proposed development and the effect of the proposed development on the site and its landscape setting, which includes Matson Park. It has found that the scale and siting of the proposed development in relation to the site and its context would result in a likely long-term overall adverse effect being no greater than minor adverse. Although the proposed development would result in an unavoidable change of use, with the loss of openness only being evident within part of the site, the proposals would bring forward a scheme that responds to the local landscape and settlement context, bringing forward a quality landscape scheme that would enhance local landscape character and respond to the amenity of the northern areas of Matson Park.
- 6.6 The proposals seek to preserve the natural environment at this location and would not require the removal of any trees which contribute to the well-treed character of Matson Park, or any significant blocks of vegetation. With the exception of two poor quality ash trees within the centre of the site, existing mature tree cover within the site, particularly those with a stronger contribution to the wider character of Matson Park, are to be retained. In fact, the proposals allow for the planting of new features at the south-western boundary, such that the future contribution to the wider landscape fabric would be considered to be beneficial.
- 6.7 For these reasons, the characteristics of the site and of the wider landscape do not present an inherent conflict, nor should they prevent the development of a new residential development within the site. The landscape character is such that the development would respect the local character and if undertaken sensitively, protect the most valuable landscape elements within and surrounding the site whilst mitigating any loss accordingly.

Visual Amenity

- 6.8 The limited size of the elements of the proposed development, along with sensitive siting, the retention of mature landscape features within the south-eastern site boundary, the combination of local topography and vegetation within the wider context, and the interrelationship of all these facets ensures that, with the exception of receptors using a ProW which runs through the site, although experiencing an improved character to the immediate context, in no instances would there be anything but limited visual effects. In consideration of the use proposed, being similar in massing to urban form found within the local context, such effects would be neutral in nature, confirming that the development would represent an acceptable addition to the local landscape, being consistent with its surrounding context, and would not detract from local visual amenity. The proposed development would not be considered to be out of character within this part of Matson, nor would the proposed built form be a perceptible addition to the urban context of Matson beyond the immediate setting of the site.
- 6.9 The amenity of surrounding residential receptors have also been assessed. Private residents with views of the proposals are likely to be limited to a number of properties at the southern boundary of the site, in which views of new residential built form would be seen. From here, particularly during winter months, short-distance direct views into the site are possible from the first floor. However, while there would be a change to views from upper storey and rear facing windows, such a change would not be considered to be out of character within the local context given the residential use proposed, nor would the change result in the alteration of main views. Within the wider context, views of the proposed development would be barely perceptible, if seen at all. As a result, overall, there are not considered to be any material adverse effects upon the visual amenity of residential receptors.

Overall Summary

- 6.10 This report has undertaken a review of the circumstances of the proposed development at School Lodge, Matson, to inform the application proposals and in order that an assessment can be made on the potential effects on the underlying landscape and visual resource. A review of national and local policy, landscape character and visual amenity has been undertaken, and the findings confirm that the site is an enclosed site, with the western areas of it relating well to the existing built context, with the eastern areas being more closely associated with the wider areas within Matson Park, and that the proposed development can be easily assimilated into the landscape context.
- 6.11 There are no anticipated material adverse effects upon landscape designations or the underlying landscape character, nor any material visual effects upon minor roads or residential receptors. Material adverse effects on ProW users are also limited, with those identified being identified for a single ProW which runs through Matson Park and through the site to Matson Lane.

6.12 For the reasons outlined within the report, the proposals represent a small-scale development, which is entirely in-keeping with the local landscape and townscape character and would not therefore result in any material landscape or visual effects or policy contravention.

Appendix EDP 1 Glossary of LVIA Terms

TERM AND DEFINITION

Baseline

The existing (pre-development) landscape and visual context of a study area, including landscape fabric, landscape character and existing views. The landscape baseline is not static and may be changing for various reasons. The landscape baseline can also consider such factors and describe the likely future landscape character of the landscape, without the proposed development.

Effects

A predicted change in the environmental baseline as a result of the proposed development taking into account the sensitivity of the receptor to the type of development proposed and the magnitude of the impact. Effects can be positive or negative.

Field Pattern

The pattern of hedges and walls that define fields in farmed landscapes (LI/IEMA 2002).

Intervisibility

Two points on the ground or two features are described as 'intervisible' when they are visible from each other.

Landscape

Landscape results from the way that different aspects of our environment (physical, social, aesthetic and perceptual) interact together and are perceived by us:

- Physical elements e.g. geology, landform, soils, flora and fauna;
- Social elements e.g. land use, enclosure patterns, and the patterns, form and scale of settlements and other built development;
- Aesthetic factors e.g. colour, form, visual texture and pattern, sounds, smells and touch; and
- Perceptual factors e.g. memories, associations, stimuli and preferences.

Landscape Capacity

The degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character. Capacity is likely to vary according to the type and nature of change being proposed.

Landscape Character

Landscape character arises from a distinct, recognisable and consistent pattern of physical and social elements, aesthetic factors and perceptual aspects in the landscape.

Landscape Character Areas (LCAs)

Single unique areas that are discrete geographical areas containing one or more landscape types. Landscape Character Types (LCTs)

Generic units of landscape that display a distinct, consistent and recognisable landscape character.

Landscape Condition

Description of the maintenance and condition of landscape elements and the degree to which landscape elements are representative of the landscape character area.

Landscape Element

A physical component (both natural and manmade) of the landscape.

Landscape Fabric

The elements and features that constitute the physical components of the landscape, including ground vegetation, hedgerows, trees, shrubs, walls, fences and vernacular structures.

Landscape Units

An umbrella term for landscape character areas and landscape character types.

TERM AND DEFINITION

Landscape Value

The importance or value of the landscape to society, usually based on landscape designations or policies as indicators of recognised value.

Mitigation

Measures, including any process, activity or design that will avoid, reduce, remedy or compensate for the predicted effects of a development on the environmental baseline.

Public Access

Land with public access includes:

- **Definitive Rights of Way** Public footpaths, bridleways, cycle routes, Byways Open to All Traffic (BOATS) and highways. Shown on Definitive Rights of Way maps held by the Local Authority;
- **Permissive Paths and Bridleways** Routes where there is public access with the permission of the landowner. Such routes are usually closed at least one day a year to prevent establishment of a Public Right of Way;
- **Public Open Space** Areas designated for specified public uses, usually in the ownership of the Local Authority. Includes parks and recreation grounds. Shown on Local Development Plans;
- **Beaches** The public have permitted access to much of the foreshore (intertidal zone between high and low tide marks) owned by the Crown Estate, and on land above high-water mark owned by the Local Authority. Some beaches above high tide mark are privately owned and some beaches and foreshore have restricted access for military purposes;
- Access Land Land where public access is currently permitted with the permission of landowners. Includes land outlined in purple on the OS Explorer (1:25,000) sheets and with:
 - No symbol Land open to public with permission of owners;
 - White oak leaf in purple box National Trust, always open;
 - Purple oak leaf in white box National Trust limited access;
 - Tree symbols in purple box Forestry Commission;
 - Single leaf in purple box Woodland Trust; and
 - White "AL" in purple box Other access land;
- **Open Access Land** Areas of mountains, moor, heath, down, common land and coastal foreshore that have been designated under Section 2 of the Countryside and Rights of Way (CRoW) Act 2000. The right of access is for walkers only and does not extend to cycling, horse riding or driving a vehicle, nor does the right of access apply to developed land, gardens or cultivated land. Under the CRoW Act 2000, there was a process of consultation that allowed the right of appeal for those with a legal interest in the land, and for sensitive ecological or archaeological Sites to be excluded. Conclusive maps showing the areas designated as open access land (Registered Common Land and Open Country) are now available from Natural England (in England) and the Countryside Council for Wales (in Wales).

Viewing Distance

The distance that a viewpoint illustration should be held from the eye in order for the illustration to match the scale of the actual view when used in the field to identify the location and scale of the proposed development.

Visibility

Visibility is a measure of the distance that can be seen by the human eye at any one time. Daylight visibility will depend on several factors, including:

- Atmospheric transparency (governed by the solid and liquid particles held in suspension in the atmosphere);
- Degree of contrast between an object and the background against which it is observed;
- Position of the sun; and
- Observer's visual acuity.

Visual Receptor(s)

An individual observer or group of observers who are capable of experiencing a change in the view.

TERM AND DEFINITION

Zone of Theoretical Visibility (ZTV)

The ZTVs consider the 'bareground' situation, unless otherwise stated where Environmental Agency Light Detection and Ranging (LIDAR) data is available and assume excellent visibility with no atmospheric attenuation. The ZTVs, therefore, represent the maximum potential, theoretical visibility i.e. the worst-case situation. In reality, other components of the landscape such as forestry, trees, buildings etc. will introduce screening effects which, coupled with the atmospheric conditions, will reduce this visibility, in some instances to a considerable extent.

This page has been left blank intentionally

Appendix EDP 2 Assessment Methodology

Table EDP A2.1: Defining the Sensitivity of the Landscape Baseline

EDP Assessm	nent Terminology and Definitions
Landscape B	aseline - Overall Sensitivity
Very High	Value : Nationally/Internationally designated/valued countryside and landscape features; strong/distinctive landscape characteristics; absence of landscape detractors.
	Susceptibility : Strong/distinctive landscape elements/aesthetic/perceptual aspects; absence of landscape detractors; landscape receptors in excellent condition. Landscapes with clear and widely recognised cultural value. Landscapes with a high level of tranquillity.
High	Value : Locally designated/valued countryside (e.g. Areas of High Landscape Value, Regional Scenic Areas) and landscape features; many distinctive landscape characteristics; very few landscape detractors.
	Susceptibility : Many distinctive landscape elements/aesthetic/perceptual aspects; very few landscape detractors; landscape receptors in good condition. The landscape has a low capacity for change as a result of potential changes to defining character.
	<i>Value</i> : Undesignated countryside and landscape features; some distinctive landscape characteristics; few landscape detractors.
Medium	Susceptibility : Some distinctive landscape elements/aesthetic/perceptual aspects; few landscape detractors; landscape receptors in fair condition. Landscape is able to accommodate some change as a result.
	<i>Value</i> : Undesignated countryside and landscape features; few distinctive landscape characteristics; presence of landscape detractors.
Low	Susceptibility : Few distinctive landscape elements/aesthetic/perceptual aspects; presence of landscape detractors; landscape receptors in poor condition. Landscape is able to accommodate large amounts of change without changing these characteristics fundamentally.
Very Low	Value : Undesignated countryside and landscape features; absence of distinctive landscape characteristics; despoiled/degraded by the presence of many landscape detractors.
	Susceptibility : Absence of distinctive landscape elements/aesthetic/perceptual aspects; presence of many landscape detractors; landscape receptors in very poor condition. As such landscape is able to accommodate considerable change.

Table EDP A2.2: Defining the Sensitivity of the Visual Baseline

Visual Baseline - Overall Sensitivity			
Very High	Value/Susceptibility : View is designed/has intentional association with surroundings; is recorded in published material; from a publicly accessible heritage asset/designated/promoted viewpoint; national/internationally designated right of way; protected/recognised in planning policy designation.		
	Examples : May include views from residential properties, National Trails; promoted holiday road routes; designated countryside/landscape features with public access; visitors to heritage assets of National Importance; Open Access Land.		

High	Value/Susceptibility : View of clear value but may not be formally recognised e.g. framed view of scenic value or destination/summit views; inferred that it may have value for local residents; locally promoted route or PRoW.
	Examples : May include from recreational locations where there is some appreciation of the visual context/landscape e.g. golf, fishing; themed rights of way with a local association; National Trust land; panoramic viewpoints marked on OS maps; road routes promoted in tourist guides and/or for their scenic value.
Medium	Value/Susceptibility : View is not widely promoted or recorded in published sources; may be typical of those experienced by an identified receptor; minor road routes through rural/scenic areas.
Weddum	Examples : May include people engaged in outdoor sport not especially influenced by an appreciation of the wider landscape e.g. pitch sports; views from minor road routes passing through rural or scenic areas.
Low	Value/Susceptibility : View of clearly lesser value than similar views from nearby visual receptors that may be more accessible.
Low	Examples : May include major road routes; rail routes; receptor is at a place of work but visual surroundings have limited relevance.
	Value/Susceptibility: View may be affected by many landscape detractors and unlikely to be valued.
Very Low	Examples : May include people at their place of work, indoor recreational or leisure facilities or other locations where views of the wider landscape have little of no importance.

Table EDP A2.3: Defining the Magnitude of Change to the Landscape an	d Visual Baseline
--	-------------------

Magnitude of Cha	nge
(Considers Scale	of Proposal/Geographical Extent/Duration and Reversibility/Proportion)
Very High	Landscape: Total loss/major alteration to key receptors/characteristics of the baseline; addition of elements that strongly conflict or integrate with the baseline. Visual: Substantial change to the baseline, forming a new, defining focus and having a defining influence on the view.
High	Landscape: Notable loss/alteration/addition to one or more key receptors/characteristics of the baseline; or, addition of prominent conflicting elements. Visual: Additions are clearly noticeable, and part of the view would be fundamentally altered.
Medium	 Landscape: Partial loss/alteration to one or more key receptors/characteristics; addition of elements that are evident but do not necessarily conflict with the key characteristics of the existing landscape. Visual: The proposed development will form a new and recognisable element within the view which is likely to be recognised by the receptor.
Low	Landscape: Minor loss or alteration to one or more key landscape receptors/characteristics; additional elements may not be uncharacteristic within existing landscape. Visual: Proposed development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component.

Magnitude of Chang	(e			
(Considers Scale of Proposal/Geographical Extent/Duration and Reversibility/Proportion)				
Very Low	 Landscape: Barely discernible loss or alteration to key components; addition of elements not uncharacteristic within the existing landscape. Visual: Proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline. 			
Imperceptible	In some circumstances, changes at representative viewpoints or receptors will be lower than 'Very Low' and changes will be described as 'Imperceptible'. This will lead to negligible effects.			

Table EDP A2.4. Determining	g the Predicted Levels of Effects to the	e Landscape and Visual Baseline
TUDIC LDI ALIT. Determining		

Overall Sensitivity	Overall Magnitude of Change					
	Very High	High	Medium	Low	Very Low	
Very High	Substantial	Major	Major/- Moderate	Moderate	Moderate/-Minor	
High	Major	Major/- Moderate	Moderate	Moderate/Minor	Minor	
Medium	Major/- Moderate	Moderate	Moderate/- Minor	Minor	Minor/-Negligible	
Low	Moderate	Moderate/- Minor	Minor	Minor/Negligible	Negligible	
Very Low	Moderate/- Minor	Minor	Minor/- Negligible	Negligible	Negligible/-None	

Table EDP A2.5: Definition of Effects

Definition of Effects				
Substantial	Effects which are in complete variance to the baseline landscape resource or visual			
	amenity.			
Major	Effects which result in noticeable and fundamental alterations to the landscape			
	resource or visual amenity.			
Moderate	Effects which result in noticeable but non-fundamental alterations to the baseline			
	landscape resource or visual amenity.			
Minor	Effects which result in slight alterations to the landscape resource or visual amenity.			
Negligible	Effects which result in barely perceptible alterations to the landscape resource or			
	visual amenity.			
None	No detectable alteration to the landscape resource or visual amenity.			
Consequence	Effects can be positive, adverse or neutral i.e. if no change arises.			
Duration	Long term (20+ years); Medium-long term (10 - 20 years;) Medium term (5 - 10 years);			
	Short term (1 – 5 years); Temporary (>12 months); Construction.			

This page has been left blank intentionally

Appendix EDP 3 Proposed Site Layout (Quattro Design Architects 5591-P-1000, Rev H, Feb 2020 and 5591 P7000, Rev D, Sept 2020) This page has been left blank intentionally



0	5	20	D	
2	1	10	50m	

www.quattrodesign.co.uk

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

-: 26.02.20 - SS: A: 21.07.20 - DC - CC: Site plan revised following planning officers comments comments. B: 29.07.20 - DC - CC:

Site plan updated with revised units. Bin and bike store now located within ground floor of accomposition block

accomodation block. C: 10.09.20 - BM - CC:

Site plan updated with revised units. D: 22.10.20 - DC:

Boundary treatment to rear of parking spaces adjacent to pond changed to knee rail. Stone pillars to adjacent to site access retained. E: 12.11.20 - DC:

Schedule of accommodation updated following floor plan revisions. F: 26.11.20 - DC:

F: 26.11.20 - DC: Access track to north of School Lodge connecting to fishing pond reduced to 3.5m in line with Highways comments. Schedule updated with revised floor areas. G: 10.02.22 - DC:

Site plan updated. Reduction of proposed residential units to 9no flats. Existing lodge building to be converted into community use. H: 21.02.22 - DC:

Hardstanding and bike rack positions around School Lodge revised. Additional parking space added.



DRAWING TITLE

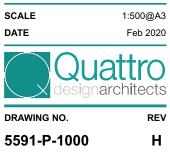
Proposed Site Layout

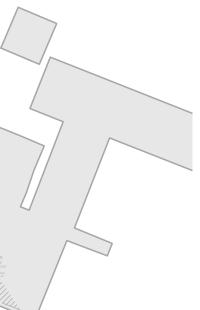
PROJECT

School Lodge, Matson

CLIENT

Gloucester City Homes











Plot 9 Plot 4 Side Elevation





Plot 5 Plot 1 Side Elevation



www.quattrodesign.co.uk

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

-: 10.09.20 - BM - CC: Drawing created. A: 22.10.20 - DC: Obscured glazing indicated to lower sections of full height windows. Materials key updated. B: 03.11.20 - CC: Window to bike store removed. C: 26.11.20 - DC Side elevations revised in line with amended floor plans w/ plot 1 and 4 now having external canopy porch. D: 09.12.20 - LM - CC: Elevations updated.

DRAWING TITLE

Proposed Elevations

PROJECT

School Lodge, Matson Lane

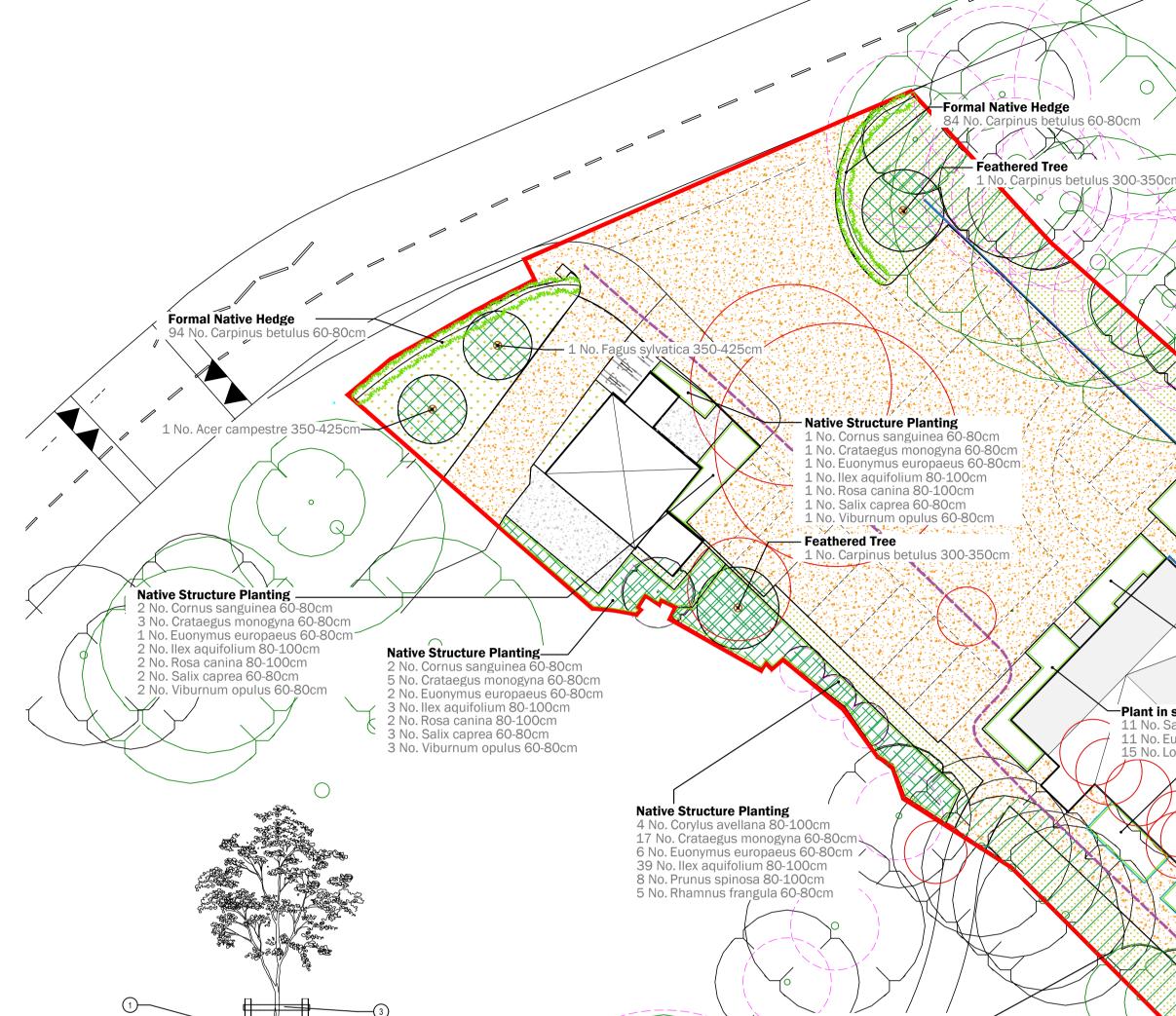
CLIENT

Gloucester City Homes (GCH)

SCALE1:200@A3DATESept 2020Sept 2020ContractionContractionContractionDRAWING NO.REV5591-P-7000D

Appendix EDP 4 Detailed Soft Landscape Drawing (edp5305_d004e 22 March 2022 JG/BC)

This page has been left blank intentionally



Existing vegetation to be 'gapped up' with evergreen shade-tolerant shrubs. This should be implemented where any significant gaps in screening are apparent once clearance works have been completed

 \bigcirc

Tree Pit Detail 2 - To be used in trees with kerb and/or services within 3 meters 1. 2x tanalised timber tree stake 2.5m, 75mm Ø driven into backfilled pit, and x2 half round timber cross bar rails, 75mm Ø secured to tree stakes to provide support to the tree. Ensure stakes are not driven through the tree rootball.

2. Green-tech or similar approved tree spiral guards, green tint: 750mm shelter. Ensure that protection methods do not impede the natural movement of trees or restrict growth. Fit according to the manufacturers recommendations.

3. Secured centrally by 2 sets of supporting bands of fine hose or equivalent webbing: min width 70mm

4. 50mm deep bark mulch layer to be spread evenly over a circular area 1000mm Ø around

the tree to prevent weed growth and retain moisture.

(2)-

5. Excavate tree pit to sufficient size to accommodate tree root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible just breaching the soil surface following backfilling.

6. RootRain Metro irrigation system or similar approved. Place around top of root ball and nail to supporting stake ensuring filler cap finishes slightly above mulch level.

7. *ReRoot* root barrier or similar approved, with root deflecting ribs installed between tree root ball and hard surfaces/services where there is a risk of root damage as the tree grows outward. As a general rule root barriers should be installed in locations where hard surfaces and/or services are located within four metres of the tree stem. Install closer to the paving/service than the tree, to allow space for the tree roots to grow into the space available, with the ribs facing the tree. Note this may mean not placing the barrier within the tree pit, but further away within its own trench. Root barriers must extend a minimum of 2m lengthways beyond the expected canopy of the mature tree. The top of the root barrier should be set as close to the soil surface as possible without being visible.

8. Backfill tree pit with subsoil and topsoil excavated from pit if this is regarded as of sufficient quality to promote the healthy establishment of the tree. If either the top soil or sub soil excavated from the pit is of poor quality then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.

9. Strimmer guard by Arbortech or similar approved to be fitted around base of tree to protect from damage by grass maintenance machinery primarily but also to provide an additional layer of defense against animal browsing.

Ensure that stakes are driven into the ground prior to the tree being planted. Refer to tree pit detail above.

Immediately after planting, water the tree, saturating the tree pit to field capacity.

For further guidance on tree planting refer to BS 8545:2014 Section 10.

Partnership Ltd. © Crown Copyright and Database Rights. 2022 Ordnance Survey 0100031673

Tree Planting Program

Trees to be planted between October and March.

A full young tree management programme with budgetary provision should be in place for all planting schemes. This management programme should be in place for at least 5 years. Between the months of March and October 3 weekly visits should be made to inspect tree specimens, and correct irrigation carried out in line with management information provided. Trees should be watered to recommended field capacity percentage, and not allowed to drop below the permanent wilting point percentage where risk if failure is likely. Tree monitoring frequency should be increased accordingly in periods of hot weather.

Irrigation of new tree planting

The timing and frequency of irrigation should take into account the prevailing weather conditions, soil moisture release characteristics, and the response of the tree species to water deficits or periods of prolonged soil saturation.

The water holding capacity varies between soils and should be assessed before determining irrigation needs.

The frequency of irrigation is more important than volume of water at any one time. Increased water volumes should not compensate for a lack of frequency.

Additional monitoring is recommended if there are 10 consecutive days during the growing season at >25°C. Water should only be added if soil moisture probe/

tensiometer values indicate that it would be appropriate to do so.

Tree Maintenance and Management During 5 Year Establishment Period Establishment

Following planting, and with regard to prevailing weather conditions, newly planted trees should be watered regularly during periods of dry weather. An irrigation pipe is provided as part of the tree pit design to deliver water directly to the roots although some watering of the soil/mulch surface around the tree is also beneficial. Watering frequency is more important than quantity to prevent the root ball of the newly planted tree from drying out.

A formal assessment of young tree health and development should be carried out annually.

competing vegetation and weeds at all times.

facilitate tree growth.

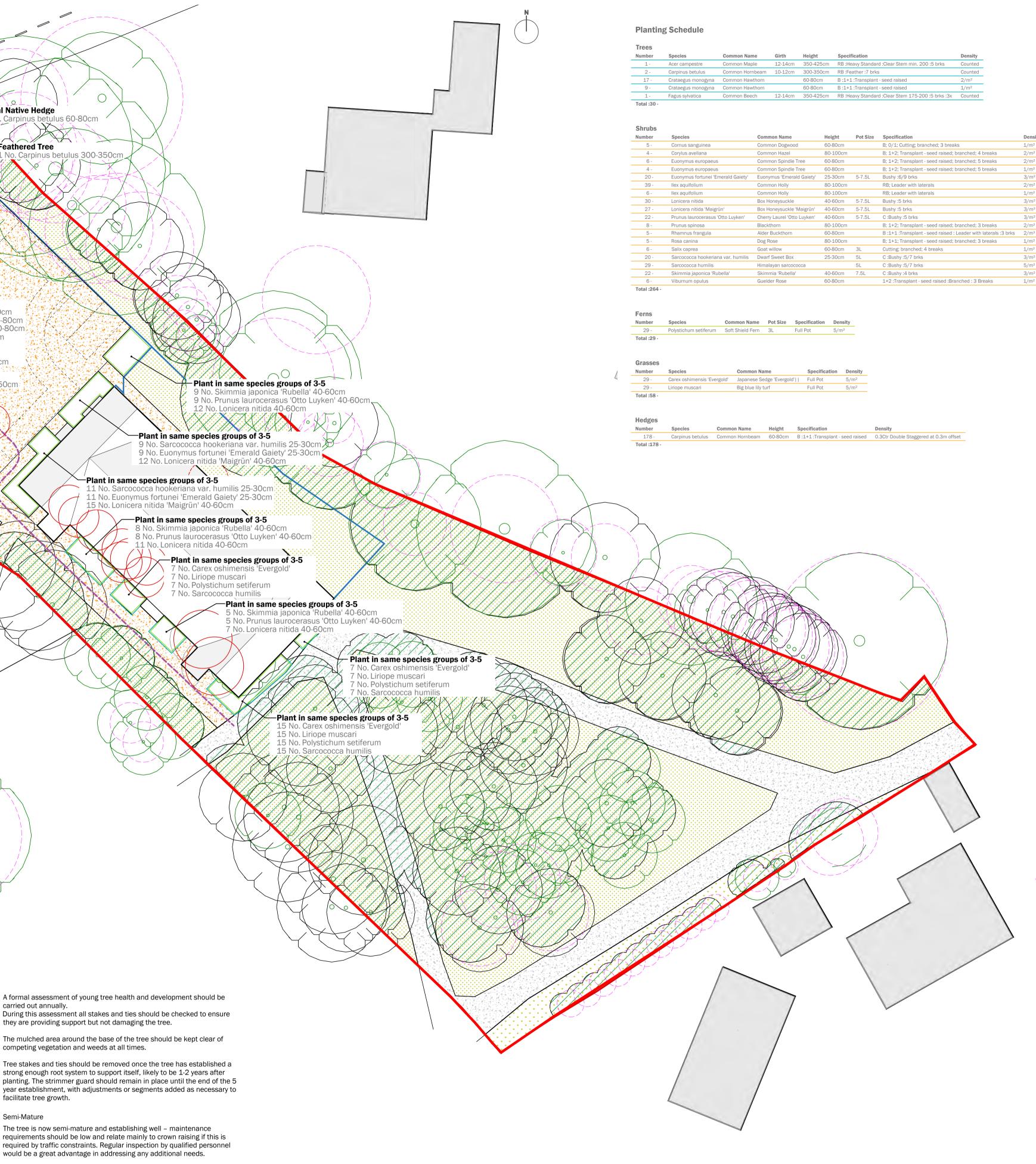
Semi-Mature

would be a great advantage in addressing any additional needs.

Mature

The final phase as the tree approaches the fully mature stage. Maintenance requirements for mature tree stock can be specialist and extremely varied, so cannot be covered in detail. Again, if the tree pit has been carefully designed and the correct species chosen for the location, maintenance will be very low and the tree can be expected to provide wide ranging benefits for a huge number of people for many years to come.

required throughout the five year establishment period. For further guidance on tree maintenance refer to BS 8545:2014 Section



Formative pruning should be carried out in accordance with BS 3998 as

eight	Pot Size	Specification	Density
D-80cm		B; 0/1; Cutting; branched; 3 breaks	1/m²
0-100cm		B; 1+2; Transplant - seed raised; branched; 4 breaks	2/m²
D-80cm		B; 1+2; Transplant - seed raised; branched; 5 breaks	2/m²
D-80cm		B; 1+2; Transplant - seed raised; branched; 5 breaks	1/m²
5-30cm	5-7.5L	Bushy :6/9 brks	3/m²
D-100cm		RB; Leader with laterals	2/m²
D-100cm		RB; Leader with laterals	1/m²
D-60cm	5-7.5L	Bushy :5 brks	3/m²
D-60cm	5-7.5L	Bushy :5 brks	3/m²
D-60cm	5-7.5L	C :Bushy :5 brks	3/m²
D-100cm		B; 1+2; Transplant - seed raised; branched; 3 breaks	2/m²
D-80cm		B :1+1 :Transplant - seed raised : Leader with laterals :3 brks	2/m²
D-100cm		B; 1+1; Transplant - seed raised; branched; 3 breaks	1/m²
D-80cm	ЗL	Cutting; branched; 4 breaks	1/m²
5-30cm	5L	C :Bushy :5/7 brks	3/m²
	5L	C :Bushy :5/7 brks	5/m²
D-60cm	7.5L	C :Bushy :4 brks	3/m²
D-80cm		1+2 :Transplant - seed raised :Branched : 3 Breaks	1/m²

RPA

Site Boundary

Existing Vegetation

Trees to be Removed

Proposed Shared Surface

Proposed Amenity Grass * EG 23 - Shade Tolerant Lawn Grass mixture or similar approved. Supplier Emorsgate Seeds Footpath Native Structure Planting Proposed Tree/Shrub

Proposed Hedge Planting

1800mm Close Board Fence

Existing Footpath

s drawing is to be read in conjunction with all other drawings and specifications These drawings have been prepared for design development and costing purposes only. All dimensions in millimeters unless otherwise specified. Do not scale off this drawing, written dimensions to be taken only.

All base plans used are provided by the client and architect, except where otherwise expressly agreed writing. EDP shall have no responsibility or liability for any loss direct or consequential. This drawing must not be copied in whole or part without prior written consent from EDP.

purpose of issue **PLANNING**

e Updated site layout	17-03-2022	MW
d Title block update and QA	03-02-2021	RB
- Original	05-09-2019	JG
rev description	date	by

Gloucester City Homes

project title

School Lodge, Matson

drawing title **Detailed Soft Landscape Drawing**

date drawing number edp5305_d004e scale 1:200 @ A1

Sheet 1 of 1 22 MARCH 2022 drawn by **JG** checked BC QA RB



the environmental dimension partnership

Plans

Plan EDP 1Environmental Planning Context
(edp5305_d002a 05 September 2019 BC/BC/GY)Plan EDP 2Findings of Visual Appraisal
(edp5305_d003a 05 September 2019 BC/BC/GY)

This page has been left blank intentionally



mental Dimension Partnership Ltd. © Crown copyright and database rights 2019 Ordnance Survey 0100031673

Site Boundary

Range Rings (at 250m intervals)

Matson Park (Ref. Area MR5)

National Forest Inventory

Ancient Woodland

Local Nature Reserve

Scheduled Monument

School Lodge, Matson, Gloucester

Plan EDP 1: Environmental Planning Context

date	05 SEPTEMBER 2019	drawn by	BC
drawing number	edp5305_d002a	checked	BC
scale	Refer to scale bar	QA	GY

Matson Lane which, although being welltreed, is largely urban in character and provides access to the residential areas of Matson and Abbeydale to the north.

Moat Primary School is located immediately to the north of Matson Lane.

Filtered views into the site are possible from the Matson Anglers pond, particularly during winter months.

Views from publicly accessible locations are limited to small areas of Matson Park and from a short section of Matson Lane.

Inset: Aerial image of the site (Source: Google Map Data, 2019) The north-west section of the site is existing developed land which extends away from the main areas of the park, being perceptually divorced from it by mature landscape scrub and tree cover.

Residential properties are typical of late 20th Century development with regular massing of residential properties within a planned and repetitive spatial arrangement. Some viewing opportunities are possible from upper storey windows.

1

Views experienced from PRoW No.39, illustrated by Photoviewpoint EDP 10, are heavily filtered by mature tree cover with close proximity views of

-I IMALIT HILLEON

urban form being seen as a visual detractor.

The south-eastern side of the site forms an area of open space, functioning as part of the wider Matson Park, being integrated into it by the footpath network and trees.

© The Environmental Dimension Partnership Ltd. @ Crown copyright and database rights 2019 Ordnance Survey 0100031673. Imagery © 2019 Getmapping plc, Map data © 2019 Google United Kingdom

-250m







Site Boundary

Range Rings (at 250m intervals)



Matson Park (Ref. Area MR5)

Zone of Primary Visibility



Photoviewpoint Location

client

Gloucester City Homes

project title

School Lodge, Matson, Gloucester

drawing title

Plan EDP 2: Findings of Visual Appraisal

 date
 05 SEPTEMBER 2019
 drawn by
 BC

 drawing number
 edp5305_d003a
 checked
 BC

 scale
 Refer to scale bar
 QA
 GY



Photoviewpoints (edp5305_d001b 05 September 2019 JTF/BC/GY)

Photoviewpoint EDP 1	View the site entrance, looking south-east
Photoviewpoint EDP 2	View from Matson Lane, looking south
Photoviewpoint EDP 3	View the site entrance, looking north-west
Photoviewpoint EDP 4	View from PRoW No. 39 within Matson Park, from the southern boundary of the site looking north
Photoviewpoint EDP 5	View from the south-western boundary of the site looking north-east
Photoviewpoint EDP 6	View from the south-eastern edge of the Matson Anglers pond, looking north-east
Photoviewpoint EDP 7	View from the western end of the Matson Anglers pond, looking north-east
Photoviewpoint EDP 8	View from Matson Park, looking north-east
Photoviewpoint EDP 9	View from Matson Park, looking north
Photoviewpoint EDP 10	View from PRoW No. 39 within Matson Park, adjacent to the rear boundary of properties on Cranwell Close, looking north-west

This page has been left blank intentionally



01/03/19 50mm 300mm

01/03/19 50mm 300mm

© The Environmental Dimension Partnership Ltd

C

the environmental

dimension partnership

PVP 1: 384965, 215694 Within site

PVP 2: 384958, 215702 c.10m

project title School Lodge, Matson drawing title Photoviewpoint EDP 1 and 2



01/03/19 50mm 300mm

© The Environmental Dimension Partnership Ltd

C

the environmental dimension partnership

Registered office: 01285 740427 www.edp-uk.co.uk

PVP 3: 385032, 215647 Within site

PVP 4: 385002, 215624 Adjacent to the southern 01/03/19 50mm 300mm boundary of the site

Gloucester City Homes project title School Lodge, Matson drawing title Photoviewpoint EDP 3 and 4



01/03/19 50mm 300mm

01/03/19 50mm 300mm

C

the environmental

dimension partnership

Registered office: 01285 740427 www.edp-uk.co.uk

PVP 5: 384979, 215640 c.10m

PVP 6: 384948, 215631 c.40m

Gloucester City Homes project title School Lodge, Matson drawing title Photoviewpoint EDP 5 and 6



C

Registered office: 01285 740427 www.edp-uk.co.uk the environmental dimension partnership

VP Location: PVP 7: 384900, 215623 c.75m PVP 8: 384915, 215589 c.85m

01/03 01/03

c functi.	LOHO.
03/19	50mm
03/19	50mm

Gloucester City Homes project title School Lodge, Matson drawing title Photoviewpoint EDP 7 and 8



C

Registered office: 01285 740427 www.edp-uk.co.uk the environmental dimension partnership

VP Location: Distance to Site: PVP 9: 384978, 215514 c.110m PVP 10: 385073, 215489 c.150m

Date 7 01/03 01/03

e Taken:	Lens:	V
03/19	50mm	3
03/19	50mm	3

Viewing Distance: date 05 SEPTEMBER 2019 drawing number drawn by JTF checked QA GY drawing

project title School Lodge, Matson drawing title Photoviewpoint EDP 9 and 10

Gloucester City Homes



e environmental imension partnership



www.edp-uk.co.uk

The Environmental Dimension Partnership Ltd. Registered as a Limited Company in England and Wales. Company No. 09102431. Registered Office: Tithe Barn, Barnsley Park Estate, Barnsley, Cirencester, Gloucestershire GL7 5EG





IEMA Transforming the world to sustainability

