

# M5 Junction 10 Improvements Scheme

Environmental Statement

Appendix 9.1

LVIA Chapter figures

TR010063 – APP 6.15

Regulation 5 (2) (a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Volume 6  
December 2023

THIS PAGE IS LEFT INTENTIONALLY BLANK

# Infrastructure Planning Planning Act 2008

## The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

### M5 Junction 10 Improvements Scheme Development Consent Order 202[x]

---

#### 6.15 Environmental Statement: Appendix 9.1 LVIA Chapter figures

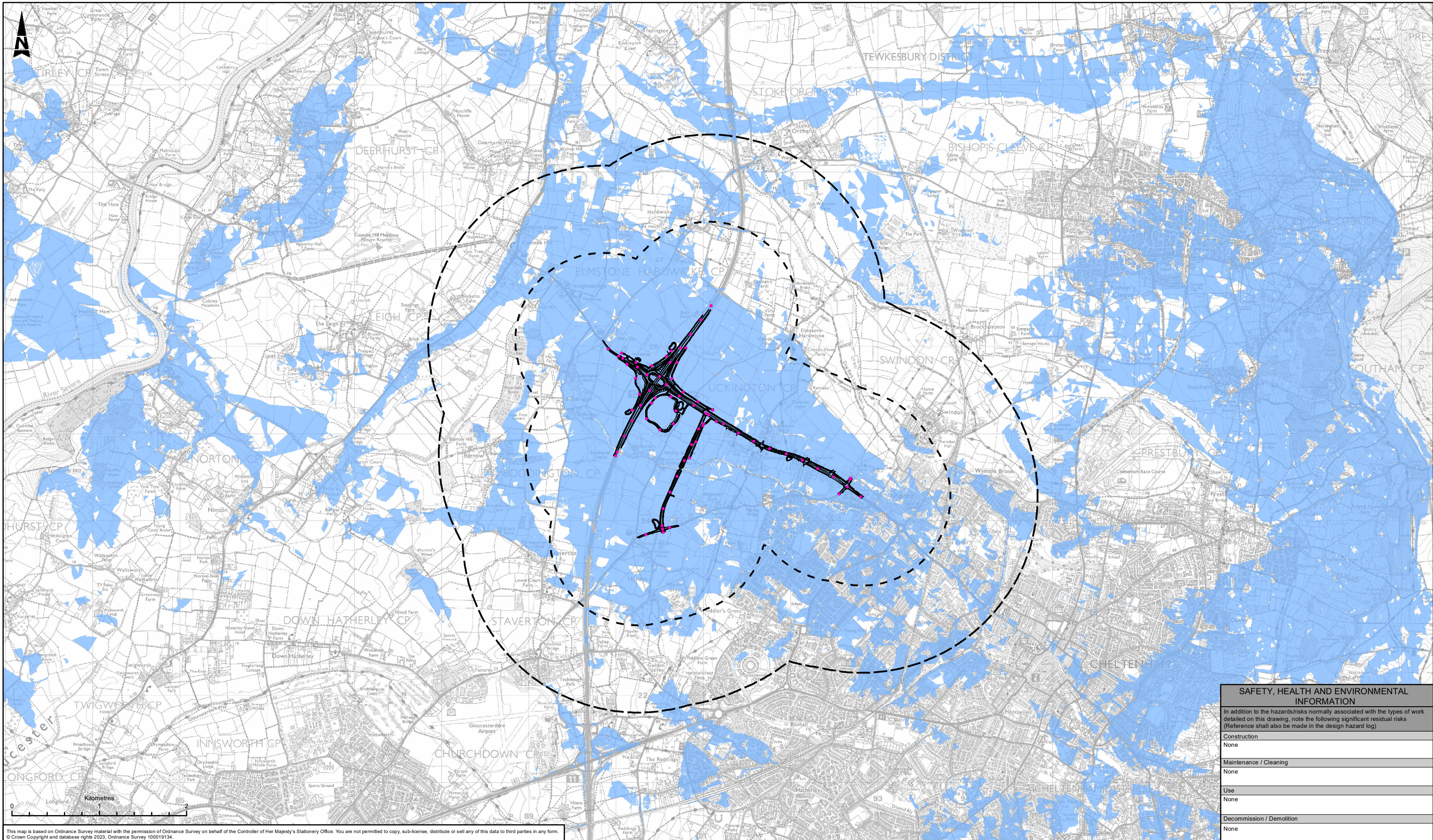
---

<b>Regulation Number:</b>	Regulation 5(2)(a)
<b>Planning Inspectorate Scheme Reference</b>	TR010063
<b>Application Document Reference</b>	TR010063/APP/6.15
<b>Author:</b>	M5 Junction 10 Improvements Scheme Project Team

<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Rev 0	December 2023	DCO Application

# 1. Schedule of figures included in this application document

Figure reference	Document title	Sheet	Document number	Revision
9-1	Zone of Theoretical Visibility winter scenario	1 of 1	GCCM5J10-ATK-ELS-ZZ-GS-GI-000002	0
9-2	Landscape plan	1 of 1	GCCM5J10-ATK-ELS-ZZ-GS-GI-000003	0
9-3	Landscape and visual constraints	1 of 1	GCCM5J10-ATK-ELS-ZZ-GS-GI-000001	0



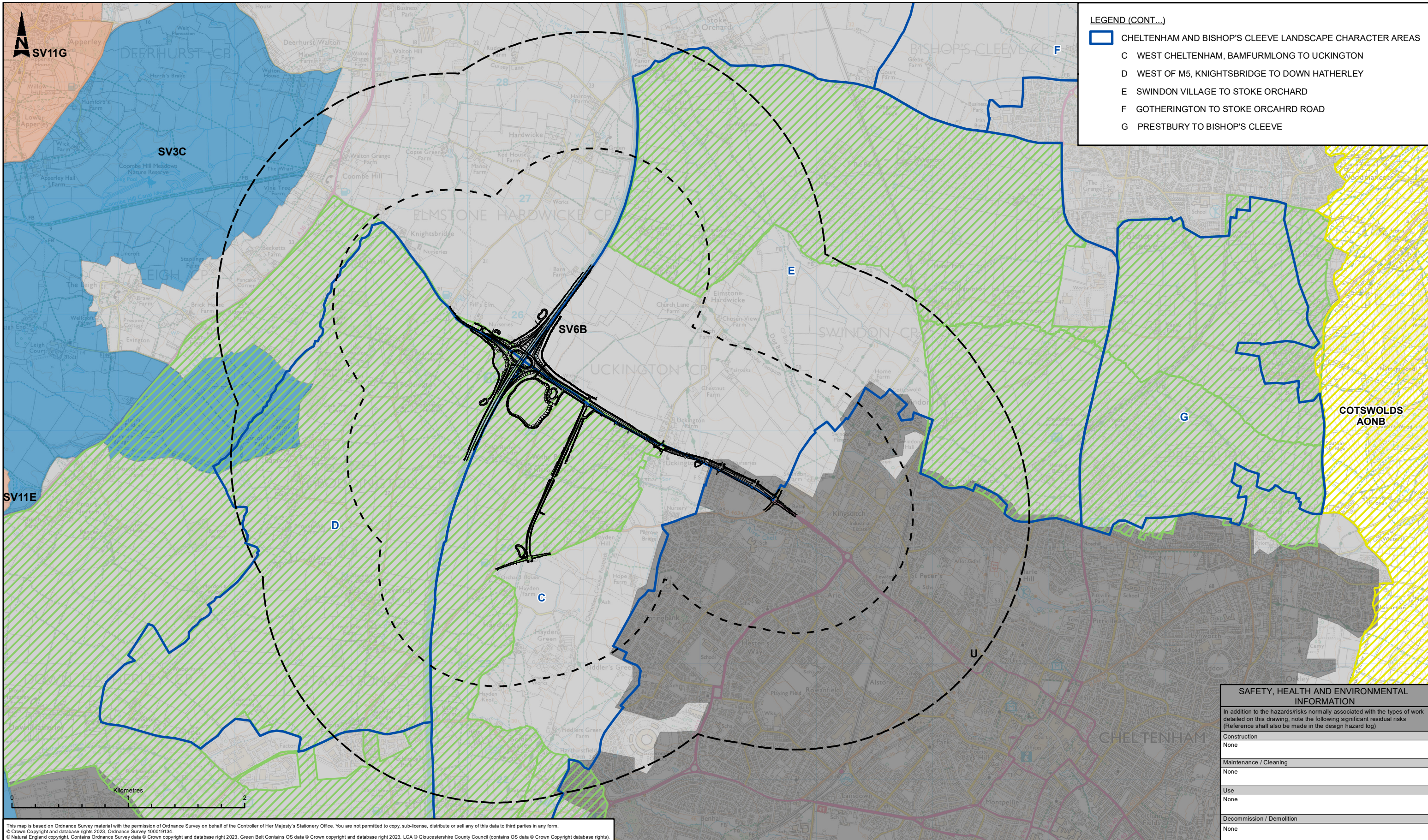
This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.  
 © Crown Copyright and database rights 2023, Ordnance Survey 100019134.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made in the design hazard log)	
Construction	None
Maintenance / Cleaning	None
Use	None
Decommission / Demolition	None

LEGEND	
	SCHEME ALIGNMENT
	1KM STUDY AREA
	2KM STUDY AREA
	INDICATIVE OBSERVER POINTS AT 200M INTERVALS ALONG SCHEME ALIGNMENT
	INDICATIVE EXTENT OF SURROUNDING AREA FROM WHICH VIEWS TO THE SCHEME ALIGNMENT MAY BE VISIBLE

NOTES	
THE ZONE OF THEORETICAL VISIBILITY (ZTV) SHOWN IS A THEORETICAL INDICATION OF THE AREA WITHIN WHICH THE PROPOSED SCHEME MAY BE VISIBLE.	
THE ZTV IS BASED ON A 5 METRE DIGITAL TERRAIN MODEL (DTM). THE DTM DOES NOT CONSIDER THE SURFACE DETAIL OF BUILDINGS OR VEGETATION, THEREFORE 8M BUILDING HEIGHTS HAVE BEEN ADDED TO SIMULATE SCREENING DURING WINTER MONTHS.	
A HEIGHT OF 1.6M HAS BEEN ADDED TO THE SURROUNDING SURFACE TO SIMULATE ASSUMED EYE LEVEL, AND A HEIGHT OF 4.5M HAS BEEN ADDED TO THE PROPOSED ROAD ALIGNMENT TO SIMULATE THE AVERAGE HEIGHT OF HGV TRAFFIC. NO PROPOSED LANDSCAPING AROUND THE SITE HAS BEEN INCLUDED IN THIS ANALYSIS.	

Description		Drawing Suitability	Status	Project Title																									
<table border="1"> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date								<b>PUBLISHED</b>	<b>A1</b>	M5 Junction 10 Improvements Scheme											
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																							
<table border="1"> <tr> <th>Description</th> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																				
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																						
<table border="1"> <tr> <th>Description</th> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date									<p>Member of the SNC-Lavalin Group            5th Floor, Block 5            Shire Hall            Bearland            Gloucester            GL1 2TH            Tel: 08000 514 514            www.atkinsglobal.com</p>		Drawing Title									
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																						
<table border="1"> <tr> <th>Description</th> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date									<p>Client</p>		Drawing Number									
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																						
<table border="1"> <tr> <th>Description</th> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date									<p>Client</p>		<table border="1"> <tr> <th>Project</th> <th>Originator</th> <th>Volume</th> </tr> <tr> <td>GCCM5J10 - ATK - ELS</td> <td>ZZ - GS - GI - 000002</td> <td></td> </tr> </table>	Project	Originator	Volume	GCCM5J10 - ATK - ELS	ZZ - GS - GI - 000002				
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																						
Project	Originator	Volume																											
GCCM5J10 - ATK - ELS	ZZ - GS - GI - 000002																												
<table border="1"> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date								<table border="1"> <tr> <th>Location</th> <th>Scale</th> <th>Project Ref.</th> <th>Sheet</th> <th>Number</th> <th>Rev.</th> </tr> <tr> <td>A3</td> <td>1:40,000</td> <td>5214106</td> <td>1 of 1</td> <td></td> <td>P02</td> </tr> </table>		Location	Scale	Project Ref.	Sheet	Number	Rev.	A3	1:40,000	5214106	1 of 1		P02
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																							
Location	Scale	Project Ref.	Sheet	Number	Rev.																								
A3	1:40,000	5214106	1 of 1		P02																								



**LEGEND (CONT...)**

- CHELTENHAM AND BISHOP'S CLEEVE LANDSCAPE CHARACTER AREAS
- C WEST CHELTENHAM, BAMFURLONG TO UCKINGTON
- D WEST OF M5, KNIGHTSBRIDGE TO DOWN HATHERLEY
- E SWINDON VILLAGE TO STOKE ORCHARD
- F GOTHERINGTON TO STOKE ORCAHRD ROAD
- G PRESTBURY TO BISHOP'S CLEEVE

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.  
 © Crown Copyright and database rights 2023, Ordnance Survey 100019134.  
 © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2023. Green Belt Contains OS data © Crown copyright and database right 2023. LCA © Gloucestershire County Council (contains OS data © Crown Copyright database rights).



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made in the design hazard log)	
Construction	None
Maintenance / Cleaning	None
Use	None
Decommission / Demolition	None

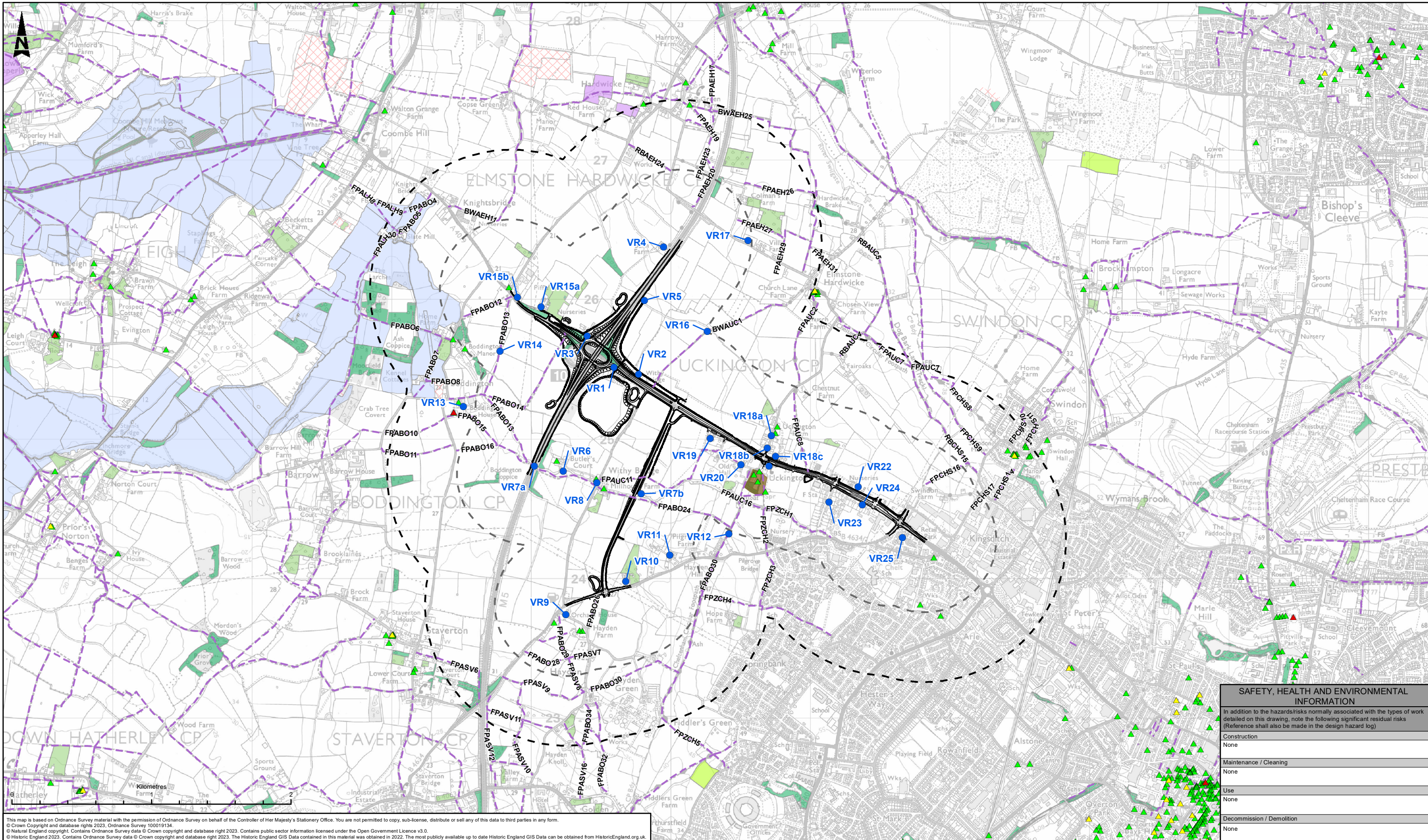
**LEGEND**

- SCHEME ALIGNMENT
- 1KM STUDY AREA
- 2KM STUDY AREA
- AREAS OF OUTSTANDING NATURAL BEAUTY (AONB)
- GREEN BELT

**VARIOUS GLOUCESTERSHIRE VALES LANDSCAPE CHARACTER AREAS (2006)**

<span style="background-color: blue; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></span> FLOODPLAIN FARMLAND	SV11E SANDHURST AND NORTON HILLS
<span style="background-color: grey; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></span> SETTLED UNWOODED VALE	SV11G APPERLEY HILL
<span style="background-color: orange; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></span> VALE HILLOCKS	SV3C THE SEVERN HAMS (GLOUCESTER TO TEWKESBURY SOUTH)
<b>OTHER</b>	SV6B VALE OF GLOUCESTER
<span style="background-color: grey; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></span> URBAN	U URBAN

Description		Drawing Suitability	Status	Project Title														
<table border="1"> <tr><th>Status</th><th>Revision</th><th>Drawn</th><th>Checked</th><th>Reviewed</th><th>Authorised</th><th>Issue Date</th></tr> <tr><td>PUBLISHED</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	PUBLISHED							<b>PUBLISHED</b>	<b>A1</b>	M5 Junction 10 Improvements Scheme
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date												
PUBLISHED																		
Description		 Member of the SNC-Lavalin Group 5th Floor, Block 5 Shire Hall Bearland Gloucester GL1 2TH Tel: 08000 514 514 www.atkinsglobal.com		Drawing Title														
Description				Drawing Number Project: GCCM5J10 - ATK - ELS Originator: ZZ - GS - GI - 000003 Volume:														
Description		<table border="1"> <tr><th>Status</th><th>Revision</th><th>Drawn</th><th>Checked</th><th>Reviewed</th><th>Authorised</th><th>Issue Date</th></tr> <tr><td>PUBLISHED</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	PUBLISHED							Client: Gloucestershire County Council Location: Project: Type: Role: Number: Rev: Original Size: A3 Scale: 1:30,000 Project Ref: 5214106 Sheet: 1 of 1 Rev: P01
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date												
PUBLISHED																		



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of Her Majesty's Stationary Office. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.  
 © Crown Copyright and database rights 2023. Ordnance Survey 100019134.  
 © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2023. Contains public sector information licensed under the Open Government Licence v3.0.  
 © Historic England 2023. Contains Ordnance Survey data © Crown copyright and database right 2023. The Historic England GIS Data contained in this material was obtained in 2022. The most publicly available up to date Historic England GIS Data can be obtained from HistoricEngland.org.uk.

LEGEND	
	SCHEME ALIGNMENT
	1KM STUDY AREA
	500M STUDY AREA
	VISUAL RECEPTOR GROUP
	EXISTING PUBLIC RIGHTS OF WAY (PRoW)
	SCHEDULED MONUMENTS
<b>LISTED BUILDINGS</b>	
	GRADE I
	GRADE II*
	GRADE II
<b>PRIORITY HABITATS</b>	
	COASTAL AND FLOODPLAIN GRAZING MARSH
	DECIDUOUS WOODLAND
	GOOD QUALITY SEMI-IMPROVED GRASSLAND
	LOWLAND MEADOWS
	TRADITIONAL ORCHARD
	NO MAIN HABITAT BUT ADDITIONAL HABITATS PRESENT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made in the design hazard log)	
Construction	None
Maintenance / Cleaning	None
Use	None
Decommission / Demolition	None

Description		Drawing Suitability	Status	Project Title																										
<table border="1"> <thead> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date								<b>PUBLISHED</b>	<b>A1</b>	M5 Junction 10 Improvements Scheme												
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																								
<table border="1"> <thead> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date								<p>Member of the SNC-Lavalin Group</p> <p>Tel: 08000 514 514</p> <p>www.atkinsglobal.com</p>		Drawing Title												
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																								
<table border="1"> <thead> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date										Drawing Number												
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																								
<table border="1"> <thead> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> </thead> <tbody> <tr> <td>PUBLISHED</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>06/03/23</td> </tr> </tbody> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	PUBLISHED						06/03/23	<table border="1"> <thead> <tr> <th>Project</th> <th>Originator</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>GCCM5J10 - ATK - ELS</td> <td>ZZ - GS - GI - 000001</td> <td></td> </tr> </tbody> </table>		Project	Originator	Volume	GCCM5J10 - ATK - ELS	ZZ - GS - GI - 000001		Drawing Title						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																								
PUBLISHED						06/03/23																								
Project	Originator	Volume																												
GCCM5J10 - ATK - ELS	ZZ - GS - GI - 000001																													
<table border="1"> <thead> <tr> <th>Status</th> <th>Revision</th> <th>Drawn</th> <th>Checked</th> <th>Reviewed</th> <th>Authorised</th> <th>Issue Date</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date								<table border="1"> <thead> <tr> <th>Location</th> <th>Scale</th> <th>Project Ref.</th> <th>Sheet</th> <th>Number</th> <th>Rev.</th> </tr> </thead> <tbody> <tr> <td>A3</td> <td>1:25,000</td> <td>5214106</td> <td>1 of 1</td> <td></td> <td>P03</td> </tr> </tbody> </table>		Location	Scale	Project Ref.	Sheet	Number	Rev.	A3	1:25,000	5214106	1 of 1		P03	Drawing Title
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date																								
Location	Scale	Project Ref.	Sheet	Number	Rev.																									
A3	1:25,000	5214106	1 of 1		P03																									
				<b>FIGURE 9-3</b> <b>LANDSCAPE AND VISUAL CONSTRAINTS</b>																										

# ATKINS

Member of the SNC-Lavalin Group

5th Floor, Block 5  
Shire Hall  
Bearland  
Gloucester  
GL1 2TH

Tel: +44 (0) 8000 514 514