



P:\022221 Land to South of Aylesham\02 TECHNICAL\B DWG\SI CAD\DWG\22-221-T-113-Proposed Spinney Lane Site Access.dwg (113) Plotted on: Feb 03, 2024 - 11:04am by T\caton

Revision				Date				Description				Drawn				Checked				Approved			
Rev	Date	Description		Dm	Chk	App	Rev	Date	Description			Dm	Chk	App	Rev	Date	Description			Dm	Chk	App	Rev
D	03/02/25	HIGHWAY WORKS AMENDED - KCC COMMENTS		TC	TW	TW																	
C	28/12/24	HIGHWAY WORKS AMENDED - KCC COMMENTS		TC	TW	TW																	
B	29/11/24	JUNCTION BELLMOUTH AMENDED		TC	TW	TW																	
A	18/10/24	FIRST ISSUE		TC	TW	SF																	

Notes:

- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- THIS DRAWING IS TO BE PRINTED IN COLOUR.
- THE TOPOGRAPHICAL SURVEY INFORMATION HAS BEEN PROVIDED BY CARTER JONAS SURVEYS LTD (DRAWING NO J0071127-23-01_ISSUE 02) AND VELOCITY TRANSPORT PLANNING SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.
- THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.



© VELOCITY TRANSPORT PLANNING LTD

Drawing Status	S1 - FOR COORDINATION				Project Title	LAND SOUTH OF AYLESHAM							
Client					Drawing Title	PROPOSED SPINNEY LANE SITE ACCESS JUNCTION (40mph ROAD SPEED)							
Architect					Scale @ A1	Date	Designed/Drawn	Checked	Approved				
					1:500	18/10/24	TC	TW	SF				
					Project Ref	Drawing Number			Rev				
					22-221	22-221-T-113			D				



Rev	Date	Description	Dm	Chk	App	Rev	Date	Description	Dm	Chk	App
C	03/02/25	HIGHWAY WORKS AMENDED - RSA COMMENTS	TC	TW	SF						
B	02/12/24	MINOR AMENDMENTS	TC	TW	TW						
A	29/11/24	FIRST ISSUE	TC	TW	TW						

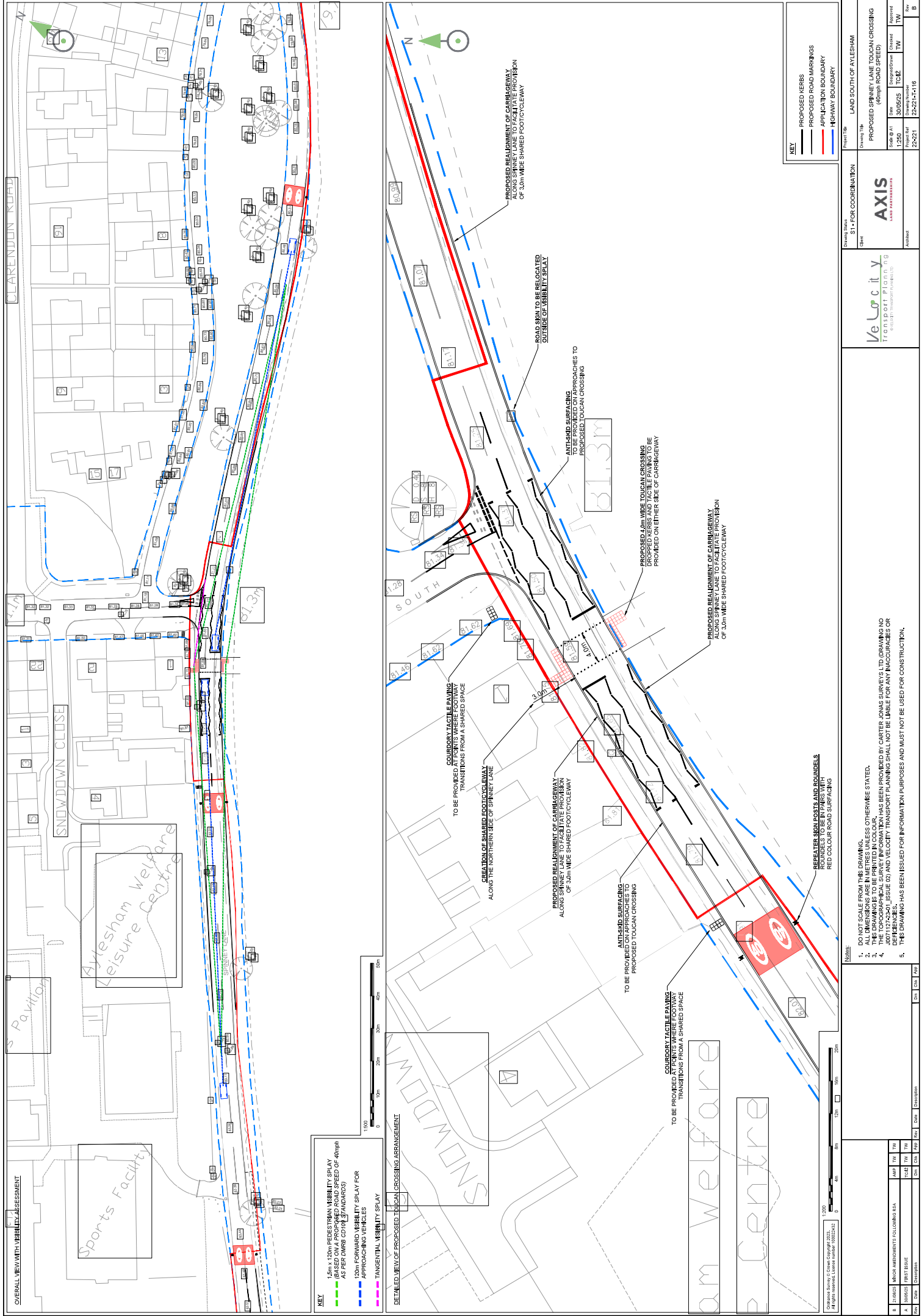
Notes:

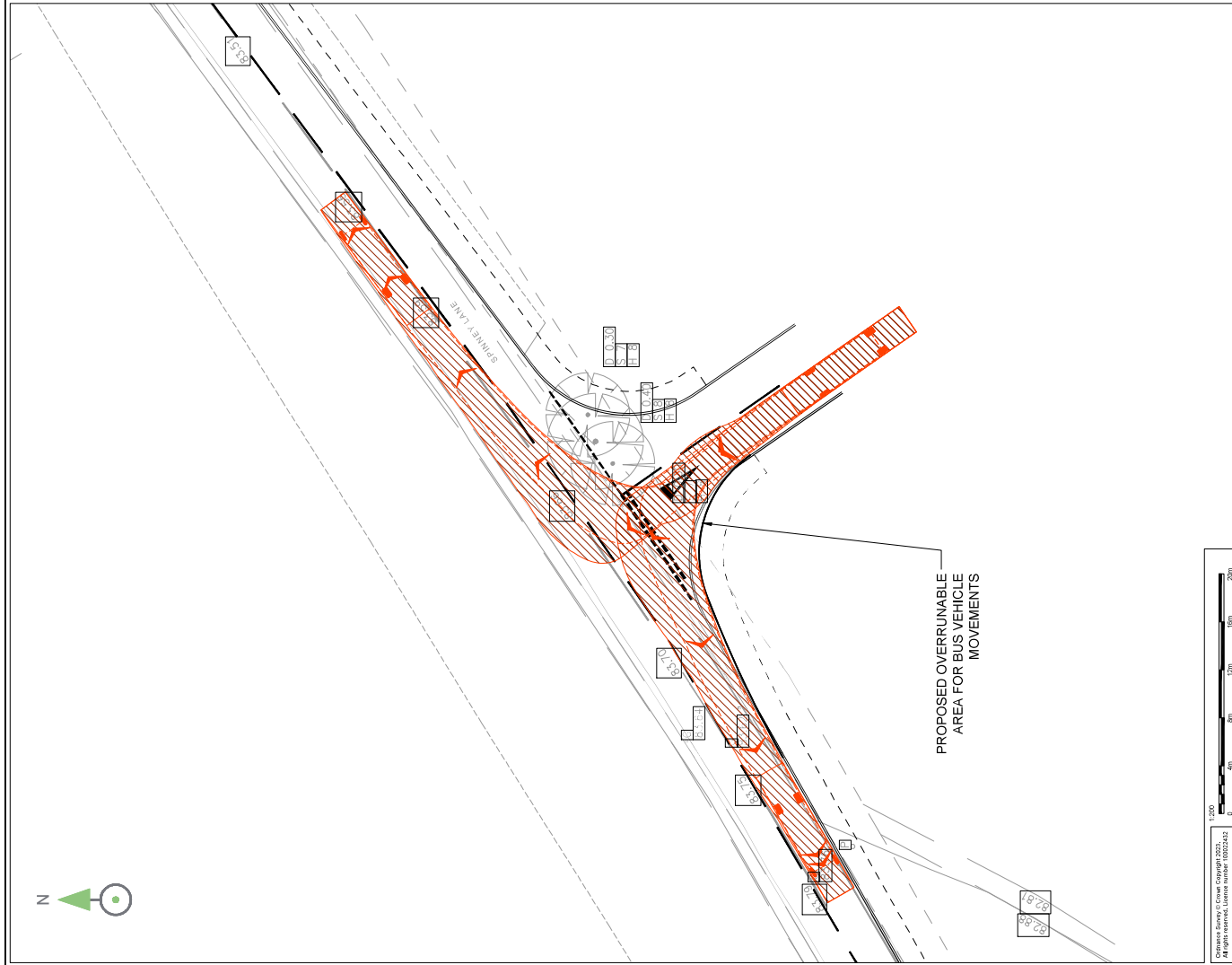
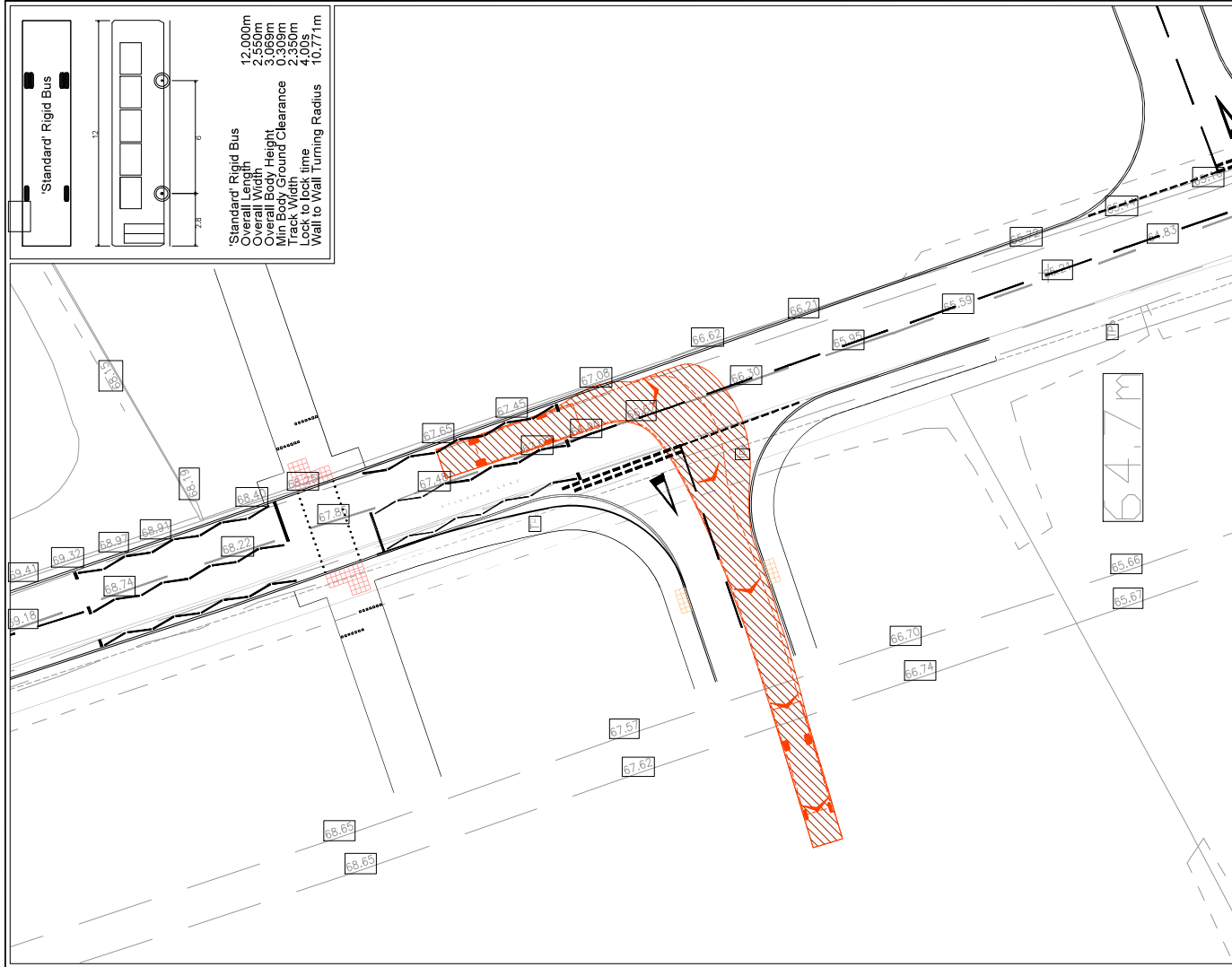
- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- THIS DRAWING IS TO BE PRINTED IN COLOUR.
- THE TOPOGRAPHICAL SURVEY INFORMATION HAS BEEN PROVIDED BY CARTER JONAS SURVEYS LTD (DRAWING NO J0071127-23-01_ISSUE 02) AND VELOCITY TRANSPORT PLANNING SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.
- THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

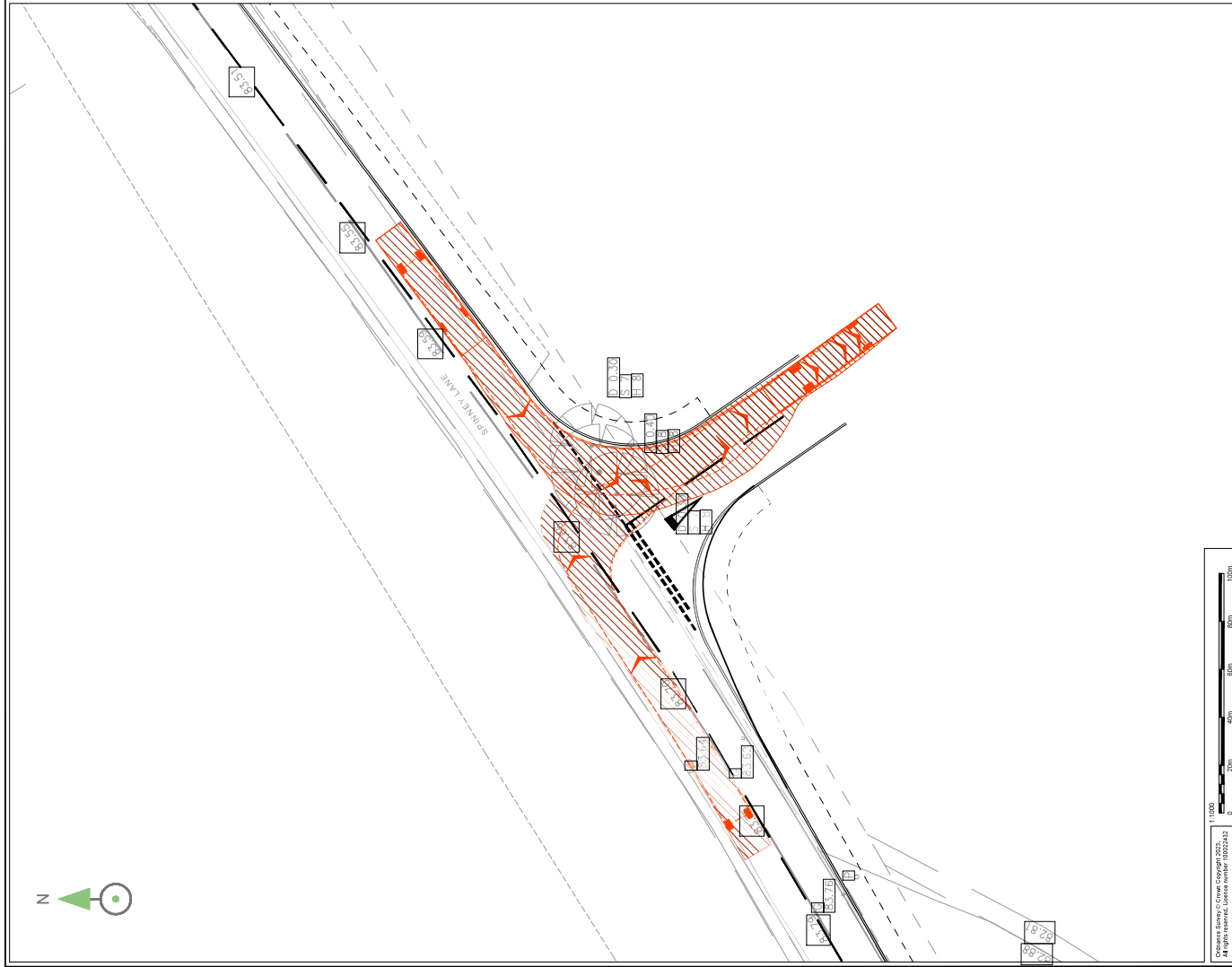
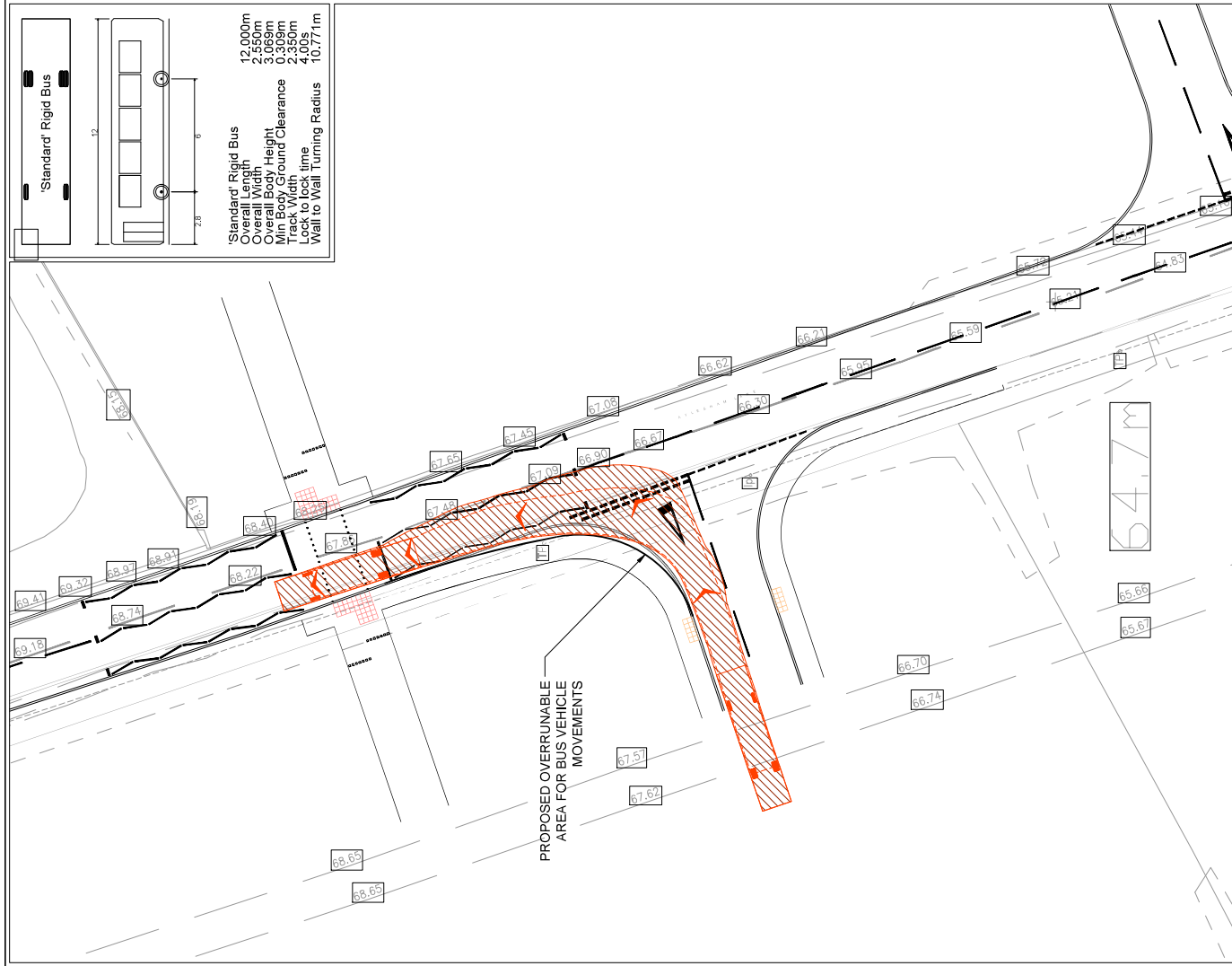


VELOCITY
Transport Planning
© VELOCITY TRANSPORT PLANNING LTD

Drawing Status	S1 - FOR COORDINATION				
Client	 AXIS LAND PARTNERSHIPS				
Architect					
Project Title	LAND SOUTH OF AYLESHAM				
Drawing Title	PROPOSED SPINNEY LANE/AYLESHAM ROAD JUNCTION PEDESTRIAN CROSSING IMPROVEMENTS				
Scale @ A1	Date	Designed/Drawn	Checked	Approved	
1:250	29/11/24	TC	TW	TW	
Project Ref	Drawing Number	Rev			
22-221	22-221-T-115	C			



[illegible]

[illegible]



P:\p2221\2221 Land to South of Aylesham02 TECHNICAL\B DWG\SI CAD\DWG\22-221-T-126-Aylesham Road Site Access Junctions.dwg (126) Plotted on: Feb 05, 2025 - 11:21 am by T Cation

Rev	Date	Description	Dm	Chk	App	Rev	Date	Description	Dm	Chk	App
D	03/02/25	HIGHWAY WORKS AMENDED - RSA COMMENTS	TC	TW	TW						
C	28/12/24	HIGHWAY WORKS AMENDED - KCC COMMENTS	TC	TW	TW						
B	02/12/24	TRAFFIC CALMING MEASURES INCLUDED	TC	TW	TW						
A	29/11/24	FIRST ISSUE	TC	TW	TW						

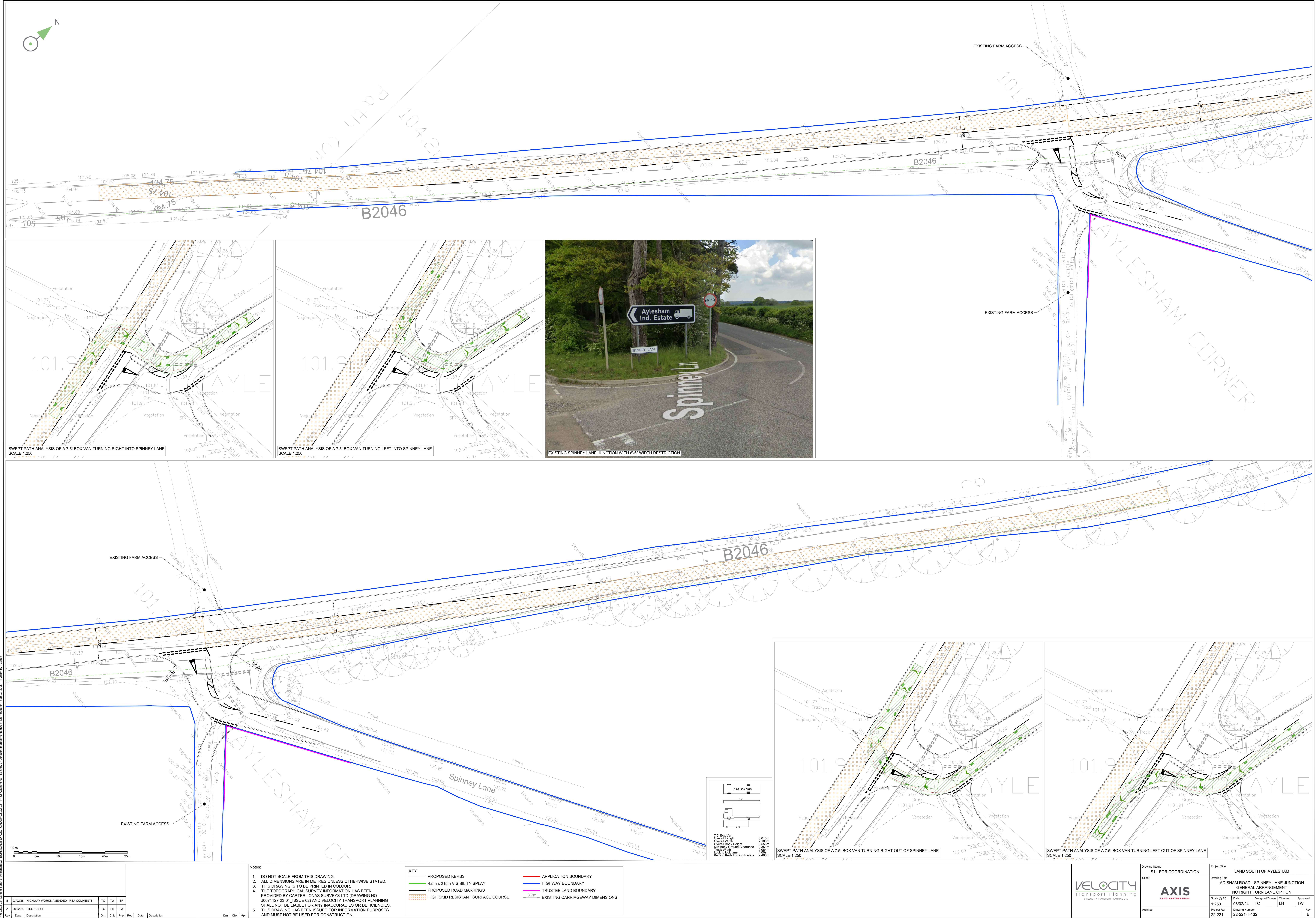
Notes:

- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- THIS DRAWING IS TO BE PRINTED IN COLOUR.
- THE TOPOGRAPHICAL SURVEY INFORMATION HAS BEEN PROVIDED BY CARTER JONAS SURVEYS LTD (DRAWING NO J0071127-23-01_ISSUE 02) AND VELOCITY TRANSPORT PLANNING SHALL NOT BE LIABLE FOR ANY INACCURACIES OR DEFICIENCIES.
- THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.



© VELOCITY TRANSPORT PLANNING LTD

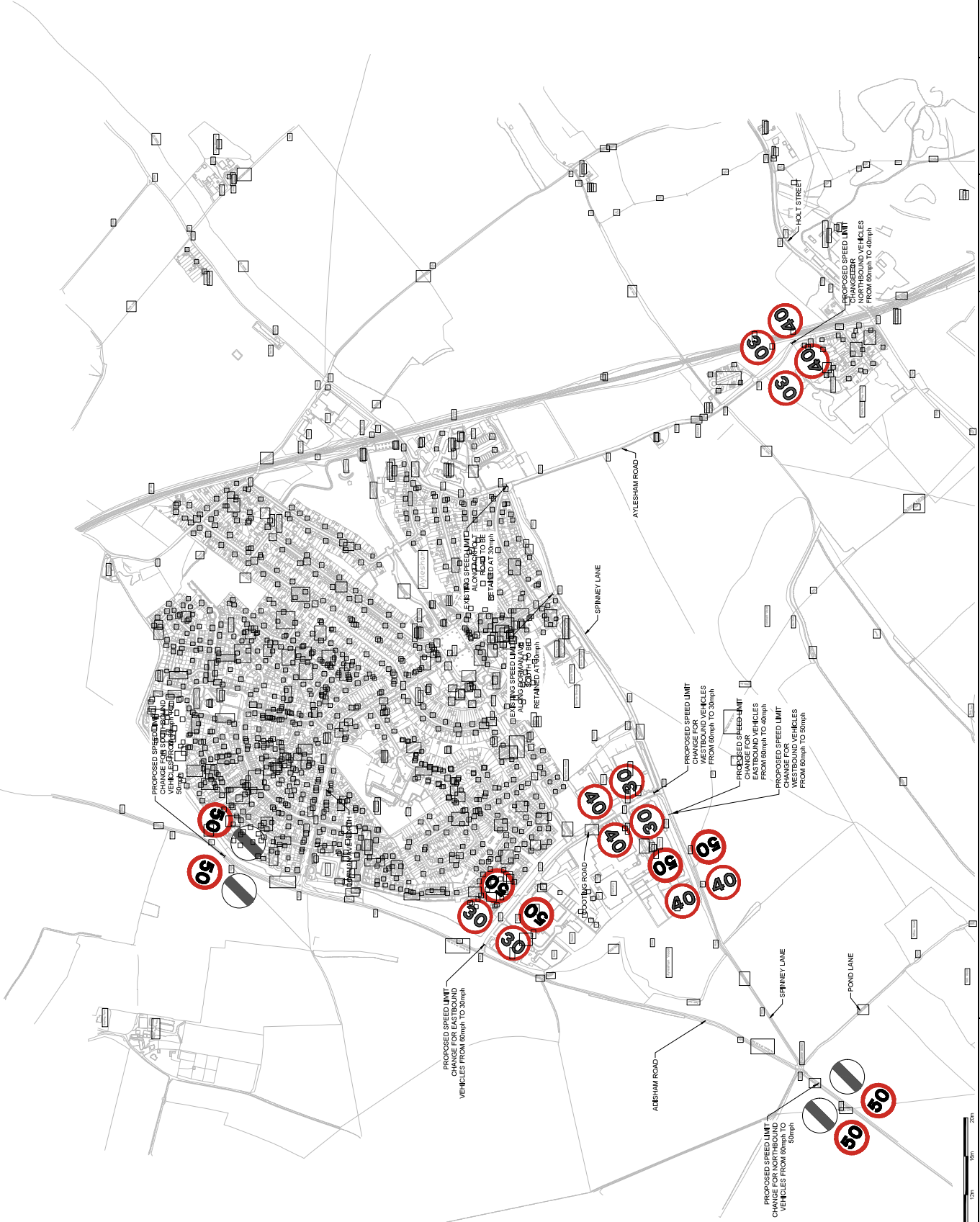
Drawing Status S1 - FOR COORDINATION	Project Title LAND SOUTH OF AYLESHAM
Client AXIS LAND PARTNERSHIPS	Drawing Title PROPOSED AYLESHAM ROAD SITE ACCESSES AND TOUCAN CROSSING (BASED ON A DESIGN SPEED OF 40mph)
Architect	Scale @ A1 1:500
	Date 19/11/24
	Designed/Drawn TC
	Checked TW
	Approved TW
	Project Ref 22-221
	Drawing Number 22-221-T-126
	Rev D





Copyright Survey & Control Copyright 2025.
All rights reserved. License number 100224242
C-VELOCITY TRANSPORT PLANNING LTD

1:200
0 4m 8m 16m 20m



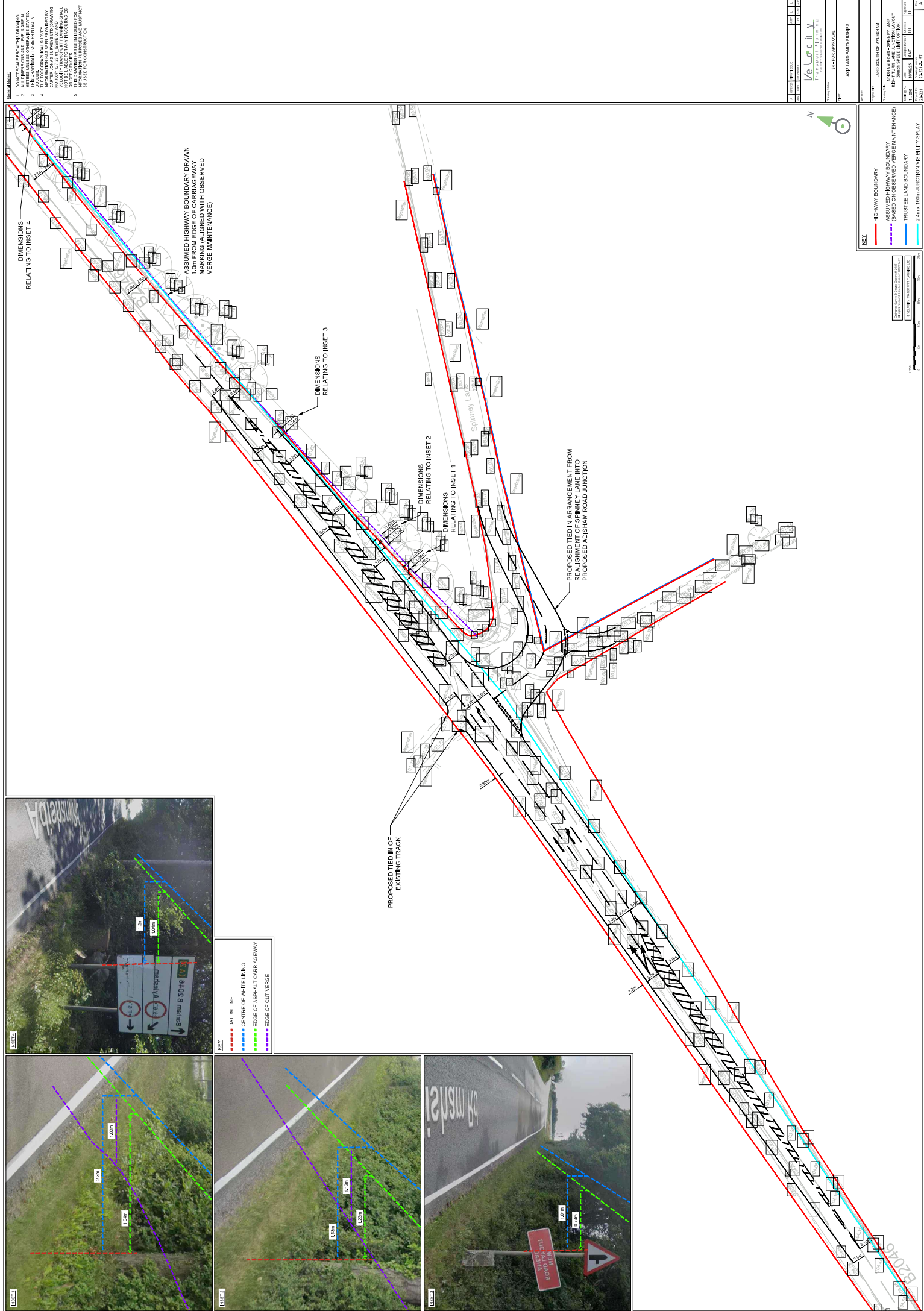
- GENERAL NOTES:
1. DO NOT SCALE FROM THIS DRAWING.
 2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
 3. THE DRAWING IS TO BE PRINTED IN COLOUR.
 4. THE DRAWING IS BASED ON OS MAPPING DATA. VELOCITY TRANSPORT PLANNING IS NOT LIABLE FOR ANY INACCURACIES OR DISCREPANCIES.
 5. THE DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.

Revision		By	Check	Date	Description
A	10000	10000	10000	10000	10000
B	10000	10000	10000	10000	10000
C	10000	10000	10000	10000	10000
D	10000	10000	10000	10000	10000
E	10000	10000	10000	10000	10000
F	10000	10000	10000	10000	10000
G	10000	10000	10000	10000	10000
H	10000	10000	10000	10000	10000
I	10000	10000	10000	10000	10000
J	10000	10000	10000	10000	10000
K	10000	10000	10000	10000	10000
L	10000	10000	10000	10000	10000
M	10000	10000	10000	10000	10000
N	10000	10000	10000	10000	10000
O	10000	10000	10000	10000	10000
P	10000	10000	10000	10000	10000
Q	10000	10000	10000	10000	10000
R	10000	10000	10000	10000	10000
S	10000	10000	10000	10000	10000
T	10000	10000	10000	10000	10000
U	10000	10000	10000	10000	10000
V	10000	10000	10000	10000	10000
W	10000	10000	10000	10000	10000
X	10000	10000	10000	10000	10000
Y	10000	10000	10000	10000	10000
Z	10000	10000	10000	10000	10000

VeLo c it y

LAND MANAGEMENT

Drawing Status		Project Title	
Client	SD - WORK IN PROGRESS	Project Title	LAND SOUTH OF AYLESHAM
Drawn By	150825	Drawn By	150825
Checked By	150825	Checked By	150825
Approved By	150825	Approved By	150825
Drawn Date	22/02/25	Drawn Date	22/02/25
Checked Date	22/02/25	Checked Date	22/02/25
Approved Date	22/02/25	Approved Date	22/02/25
Drawn By	150825	Drawn By	150825
Checked By	150825	Checked By	150825
Approved By	150825	Approved By	150825
Drawn Date	22/02/25	Drawn Date	22/02/25
Checked Date	22/02/25	Checked Date	22/02/25
Approved Date	22/02/25	Approved Date	22/02/25

[illegible]

KEY

- HIGHWAY BOUNDARY
- ASSUMED HIGHWAY BOUNDARY
(BASED ON OBSERVED VERGE MAINTENANCE)
- TRUSTEE LAND BOUNDARY
- 2.4m x 100m JUNCTION VISIBILITY SPAY

© 2002 by C. TRANSPORT PLANNING LTD
15m 20m 25m

gpi

402B

Notes:
The drawing below indicates the outline strategy for treatment of runoff associated with different areas.

Surface water runoff from all individual plots is to be dealt with within the individual ownership boundary, with roofs discharging into private soakaway and driveways discharging direct to ground via permeable paving.

Runoff from shared private areas, such as private roads and parking areas is to discharge direct to ground via permeable paving.

Runoff from adopted roads is to utilise a 2-3 tier suds system consisting of lined roadside swales where possible / appropriate (roads along flat sections of the site. Steep road sections to be piped), drainage then to discharge into a lined stilling pond, which subsequently discharges into a third SuDS zone consisting of a vegetated infiltration basin.

Note that final extent of SuDS including the amount of adopted roads able to utilise swales is subject to change at detailed design stage. However, it is noted that the required water quality improvements in accordance with Ciria C753 - The SuDS manual are met / exceeded with the use of the stilling pond and infiltration basin alone. See tables below for details

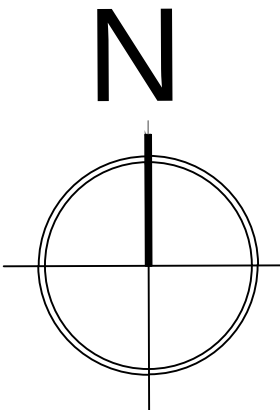
KEY:

Denotes extent of adopted highways - Piped drainage to stilling pond, followed by infiltration basin

Denotes assumed extent of adopted highways - into roadside swale, then piped to stilling pond & infiltration basin.

Roofs - into private soakaway, infiltrating direct to ground.

Private driveways & shared private surfaces - permeable paving with infiltration direct to ground.



1: DRIVEWAYS & PRIVATE SHARED AREAS		Hazard Indices		
		TSS	Metals	Hydrocarbons
	Ciria C753	0.5	0.4	0.4
		Mitigation indices		
Component		TSS	Metals	Hydrocarbons
1	Permeable Pavement**	0.7	0.6	0.7
** Permeable pavement provides 2no tiers of treatment.				
2: ADOPTED ROAD NETWORK		Hazard Indices		
		TSS	Metals	Hydrocarbons
	Ciria C753	0.7	0.6	0.7
OPTION 1 (FLAT ROADS)		Mitigation indices		
Component		TSS	Metals	Hydrocarbons
1	Swale	0.4	0.3	0.3
2	Stilling pond (wetland)	0.8(x0.5)	0.8(x0.5)	0.8(x0.5)
3	Infiltration basin	0.6(x0.5)	0.5(x0.5)	0.6(x0.5)
TOTAL		1.1	0.95	1
3: ADOPTED ROAD NETWORK		Hazard Indices		
		TSS	Metals	Hydrocarbons
	Ciria C753	0.7	0.6	0.7
OPTION 2 (STEEP ROADS)		Mitigation indices		
Component		TSS	Metals	Hydrocarbons
1	Stilling pond (wetland)	0.8	0.8	0.8
2	Infiltration basin	0.6(x0.5)	0.5(x0.5)	0.6(x0.5)
TOTAL		1.1	1.05	1.1

- Notes.
1. All dimensions are in millimetres unless noted otherwise
 2. All levels are in metres unless noted otherwise.
 3. Do not scale from this drawing - use dimensions provided only. If additional dimensions are required, ask the engineer

P3	07/25	Updated masterplan	ED
P2	01/25	Updated basin size	ED
P1	12/24	First issue	ED
Rev	Date	Description	By

Shaw Stephens Consulting

6 Howitt Street
Manchester
M15 4GB
Tel : +44 7471 977 617
Email: reville.shaw@shaw-stephens.com

Status

PRELIMINARY

Project
LAND SOUTH OF
AYLESHAM

Title
HARDSTANDING AREAS -
SUDS TREATMENT
STRATEGY

Scale
1:1250 @ A0

Date
DEC-24

Project No
0108

By
ED

Appr
NS

Drawing No
0002

Rev
P3

APPENDIX 9

INDICATIVE SUDS POND SIZES

Notes:
SUDS POND / BASIN sizes are preliminary only, and based upon the following assumptions:

Attenuation to be provided for storm events up to the 1 in 100 year + 45% climate change.

An assumed hardstanding drained area of adopted road network of 38,500m2 (west) and 5,000m2 (east) - See the GA & Key for current assumed extent.

Assumed infiltration rates as follows:
Basin west of Aylesham Road: 3.3×10^{-6} m/s, based upon average of infiltration tests within this zone (ST6-ST10, A-E).
Basin east of Aylesham Road: 3.1×10^{-5} m/s, based upon average of infiltration tests within this zone (ST3-ST5).
Above test results taken from Shaw Stephens Consulting report 'BRE 365 Soil infiltration Test Results 0108 dated 2 Jan 25'

Infiltration basin factor of safety of 2.0 assumed.

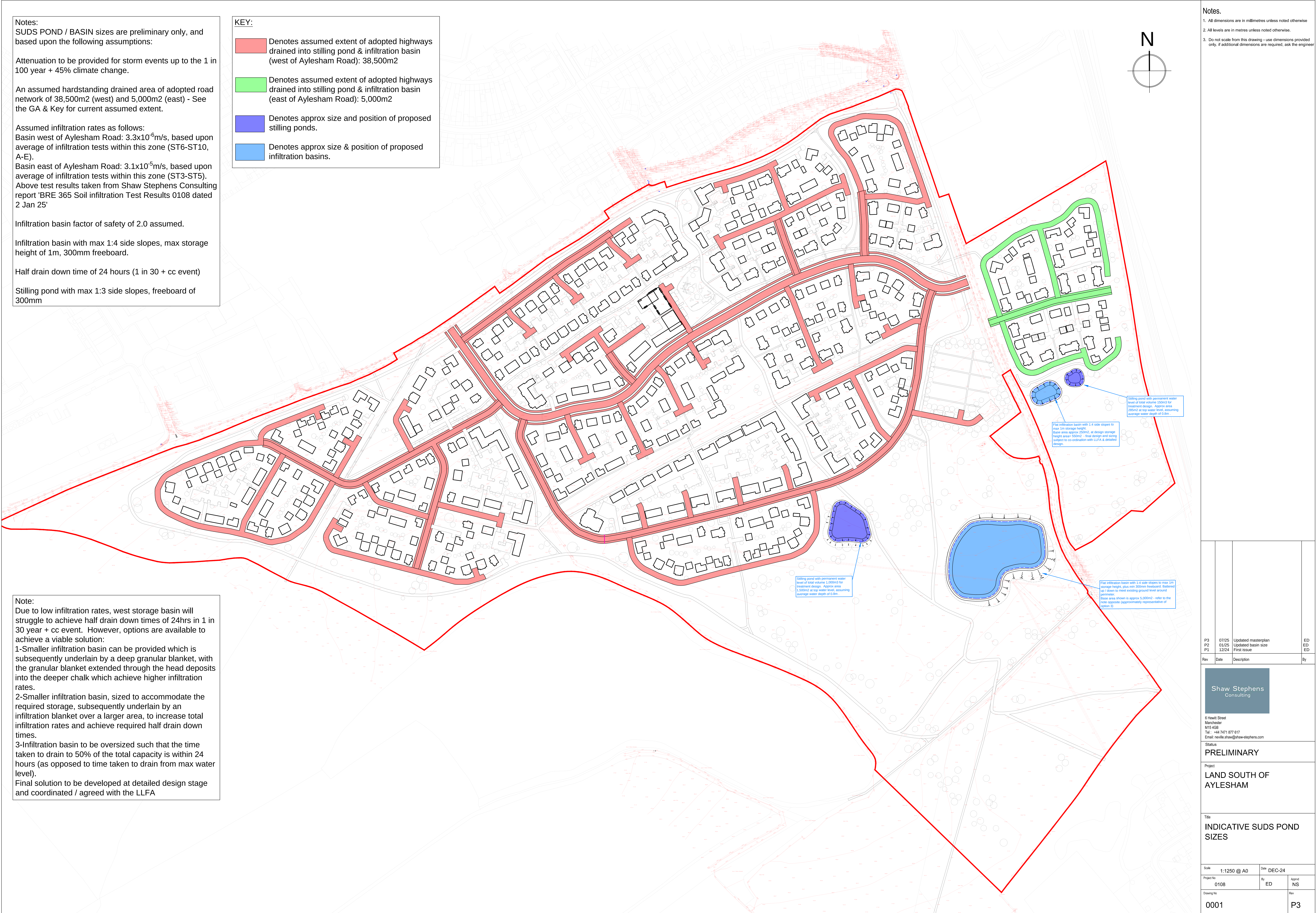
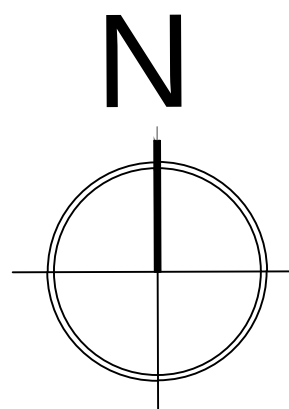
Infiltration basin with max 1:4 side slopes, max storage height of 1m, 300mm freeboard.

Half drain down time of 24 hours (1 in 30 + cc event)

Stilling pond with max 1:3 side slopes, freeboard of 300mm

- KEY:
- Denotes assumed extent of adopted highways drained into stilling pond & infiltration basin (west of Aylesham Road): 38,500m2
 - Denotes assumed extent of adopted highways drained into stilling pond & infiltration basin (east of Aylesham Road): 5,000m2
 - Denotes approx size and position of proposed stilling ponds.
 - Denotes approx size & position of proposed infiltration basins.

Note:
Due to low infiltration rates, west storage basin will struggle to achieve half drain down times of 24hrs in 1 in 30 year + cc event. However, options are available to achieve a viable solution:
1-Smaller infiltration basin can be provided which is subsequently underlain by a deep granular blanket, with the granular blanket extended through the head deposits into the deeper chalk which achieve higher infiltration rates.
2-Smaller infiltration basin, sized to accommodate the required storage, subsequently underlain by an infiltration blanket over a larger area, to increase total infiltration rates and achieve required half drain down times.
3-Infiltration basin to be oversized such that the time taken to drain to 50% of the total capacity is within 24 hours (as opposed to time taken to drain from max water level).
Final solution to be developed at detailed design stage and coordinated / agreed with the LLFA



- Notes.
1. All dimensions are in millimetres unless noted otherwise
 2. All levels are in metres unless noted otherwise.
 3. Do not scale from this drawing - use dimensions provided only. If additional dimensions are required, ask the engineer

P3	07/25	Updated masterplan	ED
P2	01/25	Updated basin size	ED
P1	12/24	First Issue	ED

Rev	Date	Description	By
-----	------	-------------	----

Shaw Stephens Consulting

6 Howitt Street
Manchester
M15 4GB
Tel : +44 7471 977 617
Email: reville.shaw@shaw-stephens.com

Status
PRELIMINARY

Project
LAND SOUTH OF AYLESHAM

Title
INDICATIVE SUDS POND SIZES

Scale	1:1250 @ A0	Date	DEC-24
Project No	0108	By	ED
Drawing No	0001	Rev	NS
			P3

APPENDIX 10

INDICATIVE SURFACE WATER DRAINAGE GA

Notes:
The drawing below indicates the outline surface water drainage layout associated with the adopted highway drainage only. Runoff from adopted roads is to utilise a 2-3 tier suds system consisting of lined roadside swales where possible / appropriate (roads along flat sections of the site. Steep road sections to be piped), drainage then to discharge into a lined stilling pond, which subsequently discharges into a third SuDS zone consisting of a vegetated infiltration basin.

Note that final extent of SuDS including the amount of adopted roads able to utilise swales is subject to change at detailed design stage. However, it is noted that the required water quality improvements in accordance with Ciria C753 - The SuDS manual are met / exceeded with the use of the stilling pond and infiltration basin alone. See tables below for details.

SUDS POND / BASIN sizes are preliminary only, and based upon the following assumptions:

Attenuation to be provided for storm events up to the 1 in 100 year + 45% climate change.

An assumed hardstanding drained area of adopted road network of 38,500m2 (west) and 5,000m2 (east) - See the GA & Key for current assumed extent.

Assumed infiltration rates as follows:
Basin west of Aylesham Road: 3.3×10^{-6} m/s, based upon average of infiltration tests within this zone (ST6-ST10, A-E).
Basin east of Aylesham Road: 3.1×10^{-5} m/s, based upon average of infiltration tests within this zone (ST3-ST5).
Above test results taken from Shaw Stephens Consulting report 'BRE 365 Soil infiltration Test Results 0108 dated 2 Jan 25'.

Infiltration basin factor of safety of 2.0 assumed.

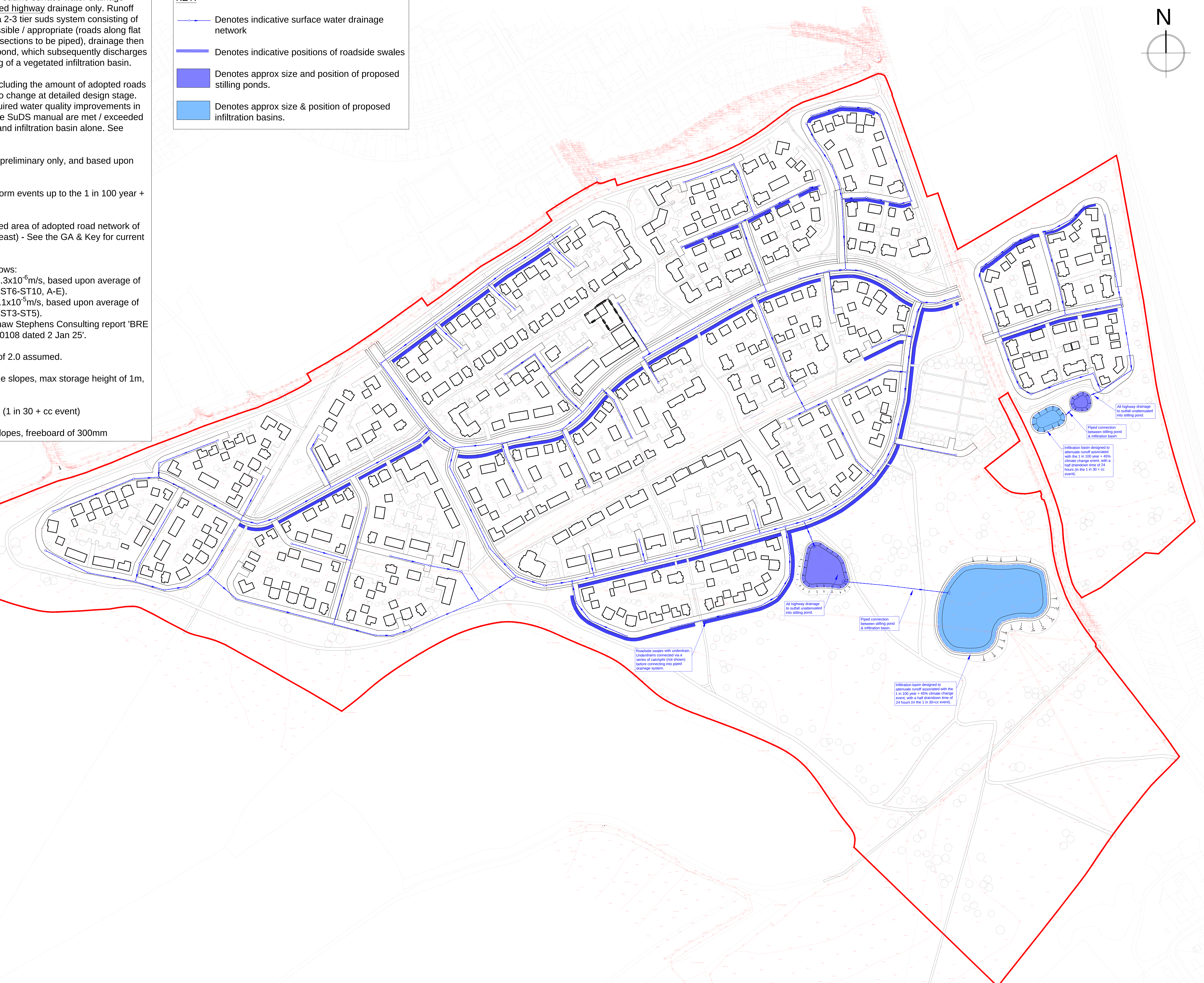
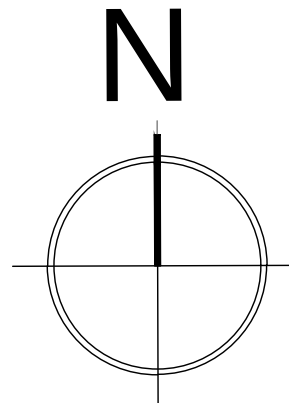
Infiltration basin with max 1:4 side slopes, max storage height of 1m, 300mm freeboard.

Half drain down time of 24 hours (1 in 30 + cc event)

Stilling pond with max 1:3 side slopes, freeboard of 300mm

KEY:

- Denotes indicative surface water drainage network
- Denotes indicative positions of roadside swales
- Denotes approx size and position of proposed stilling ponds.
- Denotes approx size & position of proposed infiltration basins.



- Notes.
1. All dimensions are in millimetres unless noted otherwise
 2. All levels are in metres unless noted otherwise.
 3. Do not scale from this drawing - use dimensions provided only. If additional dimensions are required, ask the engineer

P3	07/25	Updated masterplan	ED
P2	01/25	Updated basin size	ED
P1	12/24	First Issue	ED
Rev	Date	Description	By

Shaw Stephens Consulting

6 Hewitt Street
Manchester
M15 4GB
Tel : +44 7471 977 617
Email: reville.shaw@shaw-stephens.com

Status
PRELIMINARY

Project
LAND SOUTH OF
AYLESHAM

Title
INDICATIVE SURFACE
WATER DRAINAGE GA

Scale	1:1250 @ A0	Date	DEC-24
Project No	0108	By	ED
Drawing No	0004	Rev	NS
			P3

APPENDIX 11

OUTLINE OVERLAND FLOOD ROUTES

Shaw Stephens
Consulting

Land to the South of Aylesham

Phase 1 Site Investigation Report

**For: Axis Land Partnerships Limited and Trustees of
the Lord Fitzwalter 1988 Settlements**

Job Number:		0108
Report Reference:		0108-SSC-XX-XX-RP-C-002-P01
Issue Status / Revision:	Final	
Date:	29 January 2025	
Written By:	Neville Shaw	
Previous Revisions and Date:		
Shaw Stephens Consulting, 6 Hewitt Street, Manchester Tel: +44 7471 877 617 Email: neville.shaw@shaw-stephens.com		

This report has been prepared for the sole use of Axis Land Partnerships Limited and Trustees of the Lord Fitzwalter 1988 Settlements. It must not be copied or passed onto any third party or used for any purpose other than which it was prepared without the permission of the author. This report is copyright.

CONTENTS

1.0 INTRODUCTION

2.0 NOTES ON LIMITATIONS

3.0 PHASE 1 DESK STUDY OBJECTIVES

4.0 SITE DETAILS

- 4.1 Site Location
- 4.2 Site Reconnaissance

5.0 SITE HISTORY

6.0 GEO-ENVIRONMENTAL SETTING

- 6.1 Documented Geology
- 6.2 Coal Mining
- 6.3 Hydrology & Hydrogeology
- 6.4 Soakaway Drainage Potential
- 6.5 Additional Geo-Environmental Data
- 6.6 Previous Ground Investigation Reports

7.0 PRELIMINARY QUALITATIVE RISK ASSESSMENT (TIER 1)

- 7.1 General
- 7.2 Preliminary Conceptual Model (PCM)
- 7.3 Summary of Pollutant Linkages / PCM / Proposed Intrusive Investigation

APPENDICES

APPENDIX 1 DRAWINGS

APPENDIX 2 BRE 365 SOIL INFILTRATION TEST RESULTS REPORT

**APPENDIX 3 CURRENT CONTAMINATED LAND GUIDANCE / LEGISLATION & RISK
ASSESSMENT METHODOLOGIES**

APPENDIX 4 GROUNDSURE DATA

APPENDIX 5 SITE PHOTOGRAPHS

APPENDIX 6 CONSULTANTS COAL MINING REPORT

- 1.1 Shaw Stephens Consulting has been commissioned by Axis Land Partnerships Limited and Trustees of the Lord Fitzwalter 1988 Settlements to undertake a Phase 1 geo-environmental site investigation report for the Land to the South of Spinney Lane, Aylesham, Kent, CT3.
- 1.2 The description of development is: 'Outline planning application (with all matters reserved apart from access) for development comprising residential units and flexible non-residential floor space and associated infrastructure and other works incidental to the proposed development'.
- 1.3 The application consists of the following proposals:
- Up to 800 residential dwellings at an average density of 36.5 dph and maximum height of three storeys.
 - Up to 1,100 sq. m GIA flexible Class E/F2 floorspace for a mixed use local centre.
 - Hard and soft landscaping, including a variety of open space types, integrated green and blue infrastructure and Sustainable Drainage Systems (SuDS).
 - New infrastructure for pedestrians, cyclists, public transport and vehicles.
 - New vehicular and non-motorised (pedestrian and cycle) access from Spinney Lane and Aylesham Road and
 - Associated infrastructure and works.
- 1.4 The illustrative masterplan that accompanies this application is appended at Appendix 1.
- 1.5 The proposed development falls within the administrative jurisdiction of **DOVER DISTRICT COUNCIL**. The planning submission comprises an outline planning application (with all matters reserved apart from access) for development comprising residential units and flexible non residential floorspace and associated infrastructure and other works incidental to the proposed development.
- 1.6 A Phase I Desk Study was required as a preliminary measure prior to planning an intrusive phase of investigation and this Phase I report was devised to generally comply with the relevant principles and requirements of a wide range of guidance including BS5930:1999 as amended 2007: "*Code of Practice for Site Investigations*", BS10175: 2011 "*Investigation of Potentially Contaminated Sites - Code of Practice*", and the DEFRA/Environment Agency "*Land Contamination Risk Management*" guidance as updated in July 2023.

- 2.1 Shaw Stephens Consulting has prepared this report solely for the use of Axis Land Partnerships Limited and Trustees of the Lord Fitzwalter 1988 Settlements.
- 2.2 Should any third party wish to use or rely on the contents of the report, written approval must be sought from Shaw Stephens Consulting and a charge may be levied against such approval.
- 2.3 Shaw Stephens Consulting accepts no responsibility or liability for:
- i) The consequences of this report being used for any purpose or project other than for which it was commissioned and/or
 - ii) The consequences of use of this document by any party with whom an agreement has not been executed.
- 2.4 The information and views cited in the report are based on data derived from numerous sources. Shaw Stephens Consulting do not accept any liability for the correctness or otherwise of any information provided by third parties.
- 2.5 It should be noted that some of the elements covered in this report may be subject to change over time. Therefore, if the development is delayed or postponed, it may be necessary to consider reviewing such matters to verify that there have been no changes either at the subject site or in relation to pertinent legislation.
- 2.6 Further consultations with statutory bodies will evidently be required as the project progresses. Where responses have been received from Regulators, it is noted that the nature of these responses could be subject to change in the future.

- 3.1** The primary aim of the Phase I Desk Study was to assess whether the site is likely to be affected by contamination to an extent that it may pose a risk to human health and/or the built environment and/or the wider natural environment or is affected by any other natural or man-made features which may impact on the proposed development.
- 3.2** Specific tasks undertaken to achieve these objectives were as follows:
- Undertaking of a review of available historical mapping, environmental databases, and Environment Agency data
 - Undertaking of a site walkover inspection
 - Development of Preliminary Conceptual Model
 - Development of a Phase 2 intrusive investigation strategy

4.1 Site Location

- 4.1.1 The site comprises an irregular shaped parcel of agricultural land located immediately to the south of adopted pavements extending along Spinney Lane, Aylesham, Kent, CT3 3BE, as illustrated on the drawings contained in Appendix 1 of this report.
- 4.1.2 The **ORDNANCE SURVEY** coordinates for the approximate site centre are 623895, 151574. The approximate site centre stands at an elevation of c. 65m AOD.

4.2 Site Reconnaissance

- 4.2.1 The site reconnaissance was undertaken in August 2023 on completion of a review of all relevant historical and environmental mapping data (provided in Appendix 4).
- 4.2.2 It was observed that the 48.9 hectare site is situated predominantly within an agricultural context, with developments of mixed residential / commercial nature located immediately to the north of the site. It comprises an irregular shaped parcel of agricultural land which extends to the approximate dimensions of c. 1250m x 1100m, its longer axis being on an east – west alignment.
- 4.2.3 It is bounded to the north by public pavements extending along Spinney Lane beyond which lies a development of mixed residential / commercial properties (including Aylesham Welfare Leisure Centre). Its western and southern boundaries are adjoined by extensive parcels of agricultural land, whilst its eastern boundary lies to the east of Aylesham Road. The site itself is characterized by four arable fields subdivided by hedgerows with Aylesham Road separating the easternmost parcel of the site. The eastern parcel of the site is one arable field.
- 4.2.4 At the time of undertaking a site walkover survey, it was evident that the site is devoid of permanent structures.
- 4.2.5 The surface topography across the site was seen to range from circa 83m AOD in the north western area of the site to circa 57m AOD in the eastern area of the site adjacent to Ackholt House with surface cover comprising predominantly agricultural crops with a small pocket of deciduous species (Ackholt Wood) occupying the western site boundary and low-level mixed species hedge extending around the site periphery.
- 4.2.6 There was no visual evidence of the presence of native and/or non-native plant species within, or adjoining, the site boundary.
- 4.2.7 Vehicle and pedestrian access to the site is currently from the junction of Aylesham Road and Spinney Lane.
- 4.2.8 The information obtained from the site reconnaissance is summarised in Table 1 overleaf (also refer to Appendix 5 for site photographs).

Table 1 - Summary of Walkover Observations

FEATURE	OBSERVATION
Current Use of Land	Agricultural land
Context	Agricultural / residential / commercial context
Topography / Surfaces	The surface topography across the site was seen to range from c. 83m AOD in the north west to c. 57m AOD in the east adjacent to Ackholt House with surface cover comprising predominantly agricultural crops with a small pocket of deciduous species (Ackholt Wood) occupying the western site boundary and low-level mixed species hedge extending around the site periphery.
Dimensions	c. 1250m x 1100m with its long axis being on an east – west alignment.
Access	Vehicle and pedestrian access can be made at the junction of Aylesham Road and Spinney Lane.
Buildings Adjacent to the Site	Development of residential properties fronting onto The Crescent & South Avenue adjoining the SE boundary
Services	None observed
Material storage	None observed
Waste disposal	None observed
Other potential contamination	None observed

5.0

SITE HISTORY

5.1 The history of the site and its immediate surroundings was investigated by consultation with a range of archive resources. Geographical information, historical mapping and environmental data were primarily based on a GroundSure Environmental Report presented in Appendix 4.

5.2 A summary of the historical mapping data is given hereunder:

Table 2 - Historical Map Review

YEAR	SCALE	ON SITE	ADJACENT TO SITE	<250M
1872 [LS_2_1] 1872 [LS_2_2] 1872 [LS_2_3] 1872 [LS_3_1] 1872 [LS_3_2] 1872 [LS_3_3] 1872-73 1872-73 [LS_1_2]	1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:10,560 1:2,500	Much of the land within the site boundary is undeveloped land Ackholt Wood located at approx. site centre Few small unspecified properties located in the W portion of the site [not recognised in subsequent mapping data] Properties associated with "Ackholt" located in the E portion of the site, with associated Well Old Chalk Pit recognised in the E portion of the site	N: Road [later recognised as "Spinney Lane"] E: Railway Line	Much of the land surrounding the site is undeveloped / vacant land c.15m NW: Aylesham Wood
1896	1:10,560	No significant change	No significant change	c.50m SW: Old Chalk Pit
1898 [LS_1_2] 1898 [LS_2_1] 1898 [LS_2_2] 1898 [LS_2_3] 1898 [LS_3_1] 1898 [LS_3_3] 1906 1907 [LS_1_2] 1907 [LS_2_1] 1907 [LS_2_2] 1907 [LS_2_3] 1907 [LS_3_1] 1907 [LS_3_2] 1907 [LS_3_3]	1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:10,560 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500	Old Chalk Pit no longer recognised	No significant change	c.50m SW: Old Chalk Pit no longer recognised
1937 [LS_2_1] 1937 [LS_2_2] 1937 [LS_2_3] 1937 [LS_3_1] 1937 [LS_3_2]	1:2,500 1:2,500 1:2,500 1:2,500 1:2,500	No significant change	No significant change	c.15m N: Central Rescue Station c.15m N: Development of residential properties extending to the N [Aylesham] c.20m N: Sports Ground c.50m N: Series of Tennis Courts,

1937 [LS_3_3] 1937-38 [LS_1_2] 1938	1:2,500 1:2,500 1:10,560			Bowling Green and Putting Green c.50m SE: Tank c.75m SE: Development of residential properties extending to the S [Snowdown] c.75m SE: Pump House [later recognised as "Old Pump House"] c.100m SE: Sewage Works, in close proximity to Baths to the NE c.100m SE: Tennis Court c.200m N: Baptist Church c.200m N: Greyhound Hotel c.200m NE: 2No Schools [later recognised as Aylesham Secondary School]
1956 [LS_1_2] 1956 [LS_2_1] 1956 [LS_2_2] 1956 [LS_2_3] 1956 [LS_3_1] 1956 [LS_3_2] 1956 [LS_3_3] 1957 [LS_3_1] 1957 [LS_3_2] 1957 [LS_3_3] 1960 1966 [LS_2_3]	1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:10,000 1:2,500	Ruin located in the far E portion of the site, E of Aylesham Rd. [not recognised in subsequent mapping data] Pond at the location of the former Well [not recognised in subsequent mapping data]	No significant change	c.60m N: Football Ground with associated Pavilion and Stand c.120m N: Surgery c.200m N: Electric Sub-Station c.240m N: Garage
1973 [LS_1_2] 1973 [LS_1_2] 1975 [LS_2_2] 1975 [LS_2_3] 1975 [LS_3_3] 1976 [LS_1_2] 1976 [LS_2_1] 1976 [LS_2_1] 1976 [LS_2_1] 1976 [LS_2_2] 1976 [LS_2_2] 1976 [LS_2_3] 1976 [LS_3_1] 1976 [LS_3_1] 1976 [LS_3_2] 1977	1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:10,000	No significant change	No significant change	c.15m SE: Playing Field c.20m N/NW: Development of industrial properties c.50m N: Skating Rink c.80m N/NW: Light Engineering Works, adjacent Pharmaceutical Products Depot to the S and Plastic Packing Factory to the SW c.90m N/NW: Electric Sub-Station, adjacent Depot to the SE c.120m N/NW: Electric Sub-Station, adjacent Factory with associated Tank to the N and Plastics Factory with associated Tank to the NW c.130m N: Sheet Metal Works
1983 [LS_1_2] 1983 [LS_2_2] 1988 1993 [LS_1_2] 1993 [LS_1_2] 1993 [LS_2_2] 1993 [LS_2_3] 1993 [LS_2_3] 1993 [LS_3_1] 1993 [LS_3_2]	1:2,500 1:2,500 1:10,000 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500	No significant change	No significant change	c.200m N/NW: Depot
1995 [LS_2_1] 1995 [LS_2_3] 1995 [LS_2_3] 1995 [LS_3_1] 1995 [LS_3_1] 1995 [LS_3_2] 1995 [LS_3_2] 1995 [LS_3_3] 1995 [LS_3_3] 2001 2010 2023	1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:2,500 1:10,000 1:10,000 1:10,000	No significant change	No significant change	c.15m SE: Snowdown Caravan Site c.240m N: Garage no longer recognised
2003	1:1,250	No significant	No significant	c.50m N/NW: Factory, adjacent Electric

[Landline_1_2] 2003	1:1,250 1:1,250	change	change	Sub-Station to the N c.50m N: Skating Rink no longer recognised
[Landline_1_3] 2003	1:1,250 1:1,250			
[Landline_2_2] 2003	1:1,250 1:1,250			
[Landline_2_3] 2003	1:1,250 1:1,250			
[Landline_3_1] 2003	1:1,250 1:1,250			
[Landline_3_2] 2003	1:1,250 1:1,250			
[Landline_3_3] 2003	1:1,250 1:1,250			
[Landline_3_4] 2003	1:1,250 1:10,000			
[Landline_4_1] 2003	1:10,000			
[Landline_4_2] 2003				
[Landline_4_3] 2003				
[Landline_4_4] 2003				
[Landline_5_1] 2003				
[Landline_5_2] 2003				
[Landline_5_3] 2003				
[Landline)5_4] 2010				
2023				

5.3 A review of the available **ZETICA UXO** '*Unexploded Bomb Risk Map*' (presented in Appendix 4) indicates that the site and the surrounding area are located within a '*Low – Moderate*' risk area (*i.e. c.15No to 49No bombs per 1000 acres*).

5.4 Notwithstanding the above, given the absence of detailed mapping data from late 1930's through to the mid-1950's and taking into account the presence of a '*Ruin*' within the far eastern section of site (immediately east of Aylesham Road), there are no discernible pre/post war changes to the layout of nearby properties and associated infrastructure within these periods.

6.0 GEO-ENVIRONMENTAL SETTING

6.1 Documented Geology

- 6.1.1 The geology of the site was researched by reference to the 1:50,000 scale **BRITISH GEOLOGICAL SURVEY** (BGS) Sheet 289 Canterbury (1982) 1: 50,000 Scale Solid and Drift Editions and Smart, J.G.O. *et.al* (1966) 'Geology of the country around Canterbury and Folkestone: combined Memoir in explanation of one-inch geological sheets 289, 305 and 306 new series (Geological Survey, England & Wales. Memoirs), HMSO, London.
- 6.1.2 The **BGS** 1:10, 000 Scale Drift Geological map indicate that the overall site is underlain with natural drift deposits comprising poorly stratified clay silt sands and gravel (*Head Deposits*) of glacial / post glacial origin (*Pleistocene Epoch - Late Quaternary - Devensian > Holocene Sub Ages*).
- 6.1.3 The solid geology is documented to comprise the Seaford Chalk Formation (*formerly the Seaford Chalk Member*) consisting of firm white chalk with conspicuous semi-continuous tabular flint nodular and seams (*Coniacian - Santonian Substages*), and the Margate Chalk Member (*formerly the Margate Chalk Formation*), comprising marl-free smooth white chalk with some flint gravels (*Santonian - Campanian Substages*). Both geological units are associated with the Upper Cretaceous Period.
- 6.1.4 There are no documented geological lines of weakness (*i.e., fault lines*) within 300m of the study site.
- 6.1.5 The 'Indicative Atlas of Radon in England and Wales' (Miles. J.C.H *et.al*, 2007) Map 06 'Essex, Thames Estuary and East Kent', and the UK Radon Interactive Viewer (www.ukradon.org) shows the site to be situated within an area where it is believed that more than 30% of the properties within the surrounding area are affected by Radon and therefore Full Radon Protection Measures will be required for new structures in contact with the ground.
- 6.1.6 Geological Information obtained from the GroundSure Environmental Report is presented in Appendix 4, and summarised below:

Table 3 - Summary of Geological Data from GroundSure Report

GEOLOGY		
Data	Distance	Comments
Artificial Ground	N/A	If present, artificial ground and/or reworked ground deposits associated with the development of the site's immediate surroundings
Superficial Deposits / Drift Geology	On Site	Head Deposits of glacial / post glacial origin
Permeability of Diamicton	Maximum Permeability	High
	Minimum Permeability	Very Low
Bedrock and Solid Geology	On Site	Seaford Chalk Formation & Margate Chalk Member; both geological units associated with the Upper Cretaceous Period
Permeability of Bedrock: On Site	Minimum Permeability	Very High
	Maximum Permeability	Very High

Geological Lines of Weakness	On Site	No records
	<250m	No records
Radon Affected Area	On Site	The 'Indicative Atlas of Radon in England and Wales' (Miles. J.C.H <i>et.al</i> , 2007) Map 06 'Essex, Thames estuary and east Kent', and the UK Radon Interactive Viewer (www.ukradon.org) shows the site to be situated within an area where it is believed that more than 30% of the properties within the surrounding area are affected by Radon
Radon Protection	On Site	Full radon protective measures are necessary

Table 4 – Ground Workings

MINING, GROUNDWORKINGS AND NATURAL CAVITIES		
Data	Distance	Comments
BritPits	<500m	Onsite: Ackholt Chalk Pit – Ceased 48m W. Aylesham Wood Chalk Pit – Ceased 293m W. Cooting Downs Chalk Pits – Ceased 387m SW. Chalk Wood Chalk Pit – Ceased 395m SE. Snowdown Colliery, No. 3 Shaft – Ceased 409m SE. Snowdown Colliery, No. 2 Shaft – Ceased 421m E. Snowdown Colliery, No. 1 Shaft – Ceased 458m S. Cony Wood Chalk Pit – Ceased 498m W. Aylesham Wood Chalk Pit – Ceased
Surface ground workings	<250m	Onsite. Unspecified heap – 1938 Onsite: Old chalk pit 9m – 20m NE. Cuttings 38m W. Unspecified pit 40m W. Old chalk pit 78m 85m E. Cuttings 102m 141m NE. Cuttings 188m NW. Unspecified pit
Underground workings	<1000m	294m SE. Unspecified mine 303m – 305m SE Colliery
Underground mining extents	<500m	No records
Historical Mineral Planning Areas	<500m	No records
Non-coal mining	<1000m	Onsite: Chalk extraction 616m E. Chalk extraction 839m NE. Chalk extraction 889m NE. Chalk extraction 989m S. Chalk extraction
The Coal Authority non-coal mining	<500m	No records
Researched mining	<500m	296m SE. 304m E 314m E 319m E 320m E 386m SE 393m SE 407m E
Mining record office plans	<500m	No records
BGS mine plans	<500m	No records
Coal mining	On Site	The site is located within an area which is believed to be underlain by potentially productive deep coal measures. Coal has been mined at depth at the Snowdown Colliery some 400m SE of the site. On this basis, a Consultants Coal Mining Report was procured and confirmed the following: Coal has been extracted from beneath the site from seams at depths of 397m – 874m, the last date of workings being 1954

		- There are no unrecorded shallow workings under the site - There are no spine roadways at shallow depth under the site Based on this information, the site is not at risk of surface instability associated with past mining. The Consultants Coal Mining Report is contained in Appendix 6
Brine areas	On Site	No records
Gypsum areas	On Site	No records
Tin mining	On Site	No records
Clay mining	On Site	No records
Natural cavities	<500m	8m NE. Type: Solution Widened Joint or Fissure x 4 51m E. Type: Solution Widened Joint or Fissure x 4 441m SE. Type: Solution Widened Joint or Fissure x 1 These are not open voids but are widened joints infilled with clay and flint gravels. They are just outside the site and have no significance for the proposed development
Mining cavities	<1000m	922m NE. Nonington, Kent Chalk - Chelsea Speleological Society
Reported recent incidents	<500m	No records
Historical incidents	<500m	No records
National karst database	<500m	No records
HAZARDS		
Data	Distance	Comments
Maximum shrink swell clays	On site	Very Low - Negligible
Maximum running sands	On site	Very Low - Negligible
Maximum compressible deposits	On site	Negligible
Maximum collapsible deposits	On site	Very Low
Maximum landslides	On site	Very Low - Negligible
Maximum ground dissolution of soluble rocks	On site	Low - Very Low

6.2 Coal Mining

- 6.2.1 The appended environmental data, **BGS** mapping data and **COAL AUTHORITY** Gazetteer confirm that the site is located within an area which is believed to be underlain by potentially productive deep coal measures. Coal has been mined at depth at the Snowdown Colliery some 400m SE of the site. A **COAL AUTHORITY** mining report was procured (refer to Appendix 6) and, based on this information, the site is not considered to be at risk of surface instability associated with past mining.

6.3 Hydrology and Hydrogeology

- 6.3.1 Information on hydrology and hydrogeology obtained from a GroundSure Environmental Report is presented in Appendix 4, and summarised overleaf:

Table 5: Summary of Hydrology and Hydrogeological Data from GroundSure Environmental Report

HYDROGEOLOGY AND HYDROLOGY		
Aquifer within Superficial Drift Deposits (Head Deposits)	On site	Head Deposits: Secondary A: Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers Head Deposits: Secondary Undifferentiated: Assigned where it is not possible to attribute either category A or B to a rock type. In general, these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
Aquifer within Bedrock Deposits	On site	Seaford Chalk Formation & Margate Chalk Member - Principal: Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
Groundwater vulnerability	Onsite	On site: Soil – Surface: Leaching class: Intermediate Infiltration value: >70% Dilution value: 300- 550mm/year
Groundwater vulnerability- soluble rock risk	Onsite	Maximum soluble risk category – Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow Percentage of grid square covered by maximum risk = 0 (<47.0%)
Groundwater vulnerability- local information	Onsite	No records
Groundwater Abstraction Licenses	<500m	No records
Surface Water Abstraction Licenses	<500m	No records
Potable Water Abstraction Licences	<500m	No records
Source Protection Zones	<500m	Onsite: Zone III (Total Catchment) Zone II (Outer Catchment)
Source Protection Zones (confined aquifer)	<500m	No records
Water Network (OS Mastermap)	<200m	No records
Surface water features	<250m	No records
WFD Surface water body catchments	On Site	Site is within River Catchment for River Wingham and Little Stour / GB107040019570 Little Stour & Wingham Stour
WFD Surface water bodies	<250m	No records
WFD Groundwater bodies	<250m	On Site: East Kent Chalk - Stour Overall rating = Poor - 2019
FLOODING		
Risk of Flooding from Rivers and Sea (RoFRaS)	<50m	No records
Historical Flood Events	<250m	No records
Flood Defences	<250m	No records
Areas Benefitting from Flood Defences	<100m	No records
Flood Storage Areas	<250m	No records
Flood Zone II	<50m	No records
Flood Zone III	<50m	No records
Surface water flooding: Highest risk	On Site	1 in 30 years, Greater than 1.0m
	<50m	1 in 30 years, Greater than 1.0m
Groundwater flooding: Highest risk	On Site	High
	<50m	High

- 6.3.2 For simplified interpretation, the geological succession underlying the site may be regarded as a series of discrete units in terms of their hydrogeological significance, as illustrated below:

Table 6: Hydrogeological Interpretation

UNIT	PROPERTIES	HYDROGEOLOGICAL DESIGNATION
Made / Reworked Ground	If present, likely to be generally granular and permeable and will permit vertical and lateral transmission of groundwater.	Unproductive Aquifer
Head Deposits	Assigned where it is not possible to attribute either category A or B to a soil type. In general, these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the soil type	Secondary Undifferentiated Aquifer
Head Deposits	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers	Secondary A Aquifer
Seaford Chalk Formation & Margate Chalk Member	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers	Principal Aquifer

6.4 Soakaway Drainage Potential

- 6.4.1 The documented geology strongly indicates that soakaway drainage may function effectively on this site. A programme of soakaway testing to BRE Digest 365 has been undertaken to further assess this potential (refer to Shaw Stephens Consulting BRE 365 Soil Infiltration Test Results report in Appendix 2).
- 6.4.2 It is noted that the possibility of localised subsidence or dissolution-related degradation of the chalk bedrock occurring naturally is low based on the GroundSure data. This could however potentially increase when using concentrated point inflows from larger areas e.g. 50m² roof going to a 2m² soakaway and appropriate separation distances for infiltration features should be assessed on a specific case by case basis. This assessment will take account of foundation type, depth to chalk, infiltration rate etc at detailed design stage to determine appropriate soakaway sizes and offset distances from properties.

6.5 Additional Geo-Environmental Data

- 6.5.1 Environmental data was researched using several sources including Environment Agency Maps and the Groundsure Enviro+Geo Insight Report presented in Appendix 4 and is summarised below in Table 7. This environmental data has been used to carry out a Preliminary Qualitative Risk Assessment (Tier 1) and formulate the preliminary conceptual model as discussed in section 7.0 of this report.

Table 7: Summary of Environmental Data

POTENTIALLY CONTAMINATIVE USES IDENTIFIED FROM 1:10,000 SCALE MAPPING		
Data	Distance	Comments
Historical industrial land uses	<250m	Onsite: Old chalk pit – 1896 Onsite: Unspecified heap – 1938 Onsite: Nursery – 1896 – 1906 4m N. Rescue station 9m – 13m NE. Cuttings 19m NW. Unspecified depot 20m NE. Cuttings 25m W. Unspecified factory 38m W. Unspecified pit

		40m W. Old chalk pit 51m NE. Unspecified tank 75m SE. Pump house 78m 85m E. Cuttings 86m W. Unspecified works 102m NE. Cuttings 107m W. Unspecified factories 141m NE. Cuttings 146m W. Cannery 188m NW. Unspecified pit 194m SE. Sewage works 220m Se. Unspecified works 242m SE. Unspecified tank
Historical tanks	<250m	51m SE. Unspecified tank 55m SE. Unspecified tank 77m SE. Unspecified tank 152m NW. Unspecified tank 170m 225m W: Unspecified tanks 231m SE. Tank 241m – 244m SE. Unspecified tanks
Historical energy features	<150m	84m W. Electricity substation 113m W. Electricity substation 123m W. Electricity substation 195m N. Electricity substation 198m N. Electricity substation 217m N. Electricity substation
Historical petrol stations	<250m	No records
Historical garages	<100m	No records
Historical military land	<250m	No records
Records of Current Industrial Land Use		
Data	Distance	Comments
Recent industrial land uses	<100m	26m NW. Mast 65m W. Factory 72m W. Groupe Gullin 72m W. East Kent Recycling Ltd 90m W. Electricity substation 92m W. Woods Commercial Services Ltd 136m W. Electricity substation 139m W. YMS Travel 139m NW. Centrpro Ltd 145m W. Skelton Group 152m N. Gillies Coaches 157m W. JC's Commercial Sprayers Ltd 168m NE. Electricity substation 181m NW. Armstrong Paint Specialist 181m NW. Jacksons Joinery 206m N. A Salvatori & Son Ltd 206m N. Electricity substation 206m W. Salvation Transport 221m W. Factory
Current or recent petrol stations	<250m	No records
Electricity cables	<250m	No records
Gas pipelines	<250m	No records
Sites determined as Contaminated Land	<250m	No records
Control of Major Accident Hazards (COMAH)	<250m	107m W. Salvatori Group of Companies Limited
Regulated explosive sites	<250m	No records
Hazardous substance storage/usage	<250m	165m W. The Salvatori Group of Companies Ltd - Application reference number: No Details
Historical licensed industrial activities (IPC)	<250m	No records
Licensed industrial activities (Part A(1))	<250m	176m N. Enviro Group - Permit Number: PP3934UY - Original Permit Number: PP3934UY
Licensed pollutant release (Part A(2)/B)	<250m	151m W. Unit 4, Covert Road - Status: Historical Permit

		159m W. Marley Waterproofing Ltd, - Historical Permit
Radioactive Substance Authorisations	<250m	No records
Licensed Discharges to controlled waters	<250m	67m W. Permit Number: P00283L / Permit Version: 1 67m W. Permit Number: P06737R / Permit Version: 1
Pollutant release to surface waters (Red list)	<250m	No records
Pollutant release to public sewer	<250m	No records
List 1 Dangerous Substances	<250m	No records
List 2 Dangerous Substances	<250m	No records
Pollution Incidents (EA/NRW)	<250m	33m E. Incident Date: 30/10/2002 - Incident Identification: 117778 248m W. Incident Date: 25/08/2007 - Incident Identification: 525992
Pollution inventory substances	<250m	No records
Pollution inventory waste transfers	<250m	No records
Pollution inventory radioactive waste	<250m	No records

WASTE AND LANDFILL		
Data	Distance	Comments
Active or recent landfill	<250m	No records
Historical landfill (BGS records)	<250m	No records
Historical landfill (LA/mapping records)	<250m	No records
Historical landfill (EA/NRW records)	<250m	No records
Historical waste sites	<250m	51m W. East Kent Recycling Limited
Licensed waste sites	<250m	2m W. Clearers South East Ltd / Environmental Permitting Regulations Waste) Licence Number: CAM001 68m W. Clearers South East Ltd / Environmental Permitting Regulations (Waste) Licence Number: EAS148
Waste exemptions	<250m	Onsite: WEX233184 / Storage of sludge Onsite: WEX309353 / Storage of sludge 63m W. WEX133729 / Use of waste to manufacture finished goods 63m W. WEX281049 / Use of waste to manufacture finished goods 73m W. EPR/GF0002TF /A001 / Use of waste to manufacture finished goods 95m N. WEX243896 / Use of waste in construction 208m SE. WEX107805 / Storage of sludge 209m SE. EPR/GF0206FT /A001 / Storage of sludge

ENVIRONMENTAL DESIGNATIONS		
Data	Distance	Comments
Sites of Special Scientific Interest (SSSI)	<500m	None
Conserved wetland sites (Ramsar sites)	<500m	None
Special Areas of Conservation (SAC)	<500m	None
Special Protection Areas (SPA)	<500m	None
National Nature Reserves (NNR)	<500m	None
Local Nature Reserves (LNR)	<500m	None
Designated Ancient Woodland	<500m	Onsite: Ackholt Wood Ancient & Semi-Natural Woodland 7m W. Aylesham Wood Ancient Replanted Woodland 306m S. Unknown Ancient & Semi-Natural Woodland 319m SE. Oxney Wood Ancient & Semi-Natural Woodland 415m S. Chalk Wood Ancient & Semi-Natural Woodland
Biosphere Reserves	<500m	None
Forest Parks	<500m	None
Marine Conservation Zones	<500m	None
Green Belt	<500m	None
Proposed Ramsar sites	<500m	None
Possible Special Areas of Conservation	<500m	None

(PSAC)		
Potential Special Protection Areas (pSPA)	<500m	None
Nitrate Sensitive Areas	<500m	None
Nitrate Vulnerable Zones	<500m	On site Wingham River NVZ Surface Water 512 Existing Onsite: East Kent Groundwater 67 Existing

6.6 Previous Ground Investigation Reports

- 6.6.1 Searches and consultations have not established evidence of previous ground investigation works having been undertaken on this site.

7.0 PRELIMINARY QUALITATIVE RISK ASSESSMENT (TIER 1)

7.1 General

- 7.1.1 Based on the foregoing study, there is a '*Low - Moderate*' potential for the presence of contamination associated with the historic land uses on the site and/or immediately adjoining the study site of the site, and hence a preliminary risk assessment was undertaken.
- 7.1.2 The risk assessment methodologies adopted by **Shaw Stephens Consulting** are based on current available guidance from several sources and are included in Appendix 3.
- 7.1.3 The Tier 1 Risk Assessment and Preliminary Conceptual Model (PCM) were formulated using the information discussed above and based on the understanding that the site will be developed as per the below proposals:
- Up to 800 residential dwellings at an average density of 36.5 dph and maximum height of three storeys.
 - Up to 1,100 sq. m GIA flexible Class E/F2 floorspace for a mixed use local centre.
 - Hard and soft landscaping, including a variety of open space types, integrated green and blue infrastructure and Sustainable Drainage Systems (SuDS);
 - New infrastructure for pedestrians, cyclists, public transport and vehicles.
 - New vehicular and non-motorised (pedestrian and cycle) access from Spinney Lane and Aylesham Road; and
 - Associated infrastructure and works.
 - Drinking water will be from a mains supply.
- 7.1.4 In constructing the Preliminary Conceptual Model (PCM), **Shaw Stephens Consulting** applied the guidance contained in CIRIA C552: 2001. This recommends use of a Risk Matrix which classifies risk based on the product of Probability of a source being present, and the Consequence of receptors being exposed to the source. Guidance tables setting out the classifications of probability and consequence together with a risk matrix are given in Tables 8 - 9 hereunder. In using this approach **Shaw Stephens Consulting** recommends actual intrusive investigation of any Risk Classification of "*Moderate*" or over.

Table 8: Matrix of consequences against probability to gain a risk classification [CIRIA C552, 2001]

		CONSEQUENCE			
		SEVERE	MEDIUM	MILD	MINOR
Probability	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / Low Risk
	Likely	High Risk	Moderate Risk	Moderate / Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate / Low Risk	Low Risk	Very Low Risk
	Unlikely	Moderate / Low Risk	Low Risk	Very Low Risk	Very Low Risk

Table 9: Classification Definitions (C552 CIRIA, 2001)

CLASSIFICATION	DEFINITION
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard. Or there is evidence that server harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that such harm would be server, or if any harm were to occur it is more likely that harm would be relatively mild. Investigation (if not undertaken already) is normally required to clarify the risk and to determine to potential liability. Some remedial works may be required in the longer term.
Moderate / Low	
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be server.

7.2 Preliminary Conceptual Model (PCM)

7.2.1 By application of the risk assessment methodology outlined above, the following PCM was constructed.

Table 10: Preliminary Conceptual Model (PCM)

POLLUTANT LINKAGE	SOURCE	PATHWAY	RECEPTOR	PROBABILITY	CONSEQUENCE	RISK RATING
1	Made Ground /Imported made ground associated with the development of the adjoining area	Soil and / or soil dust ingestion	Construction workers Future occupants (adults & infants) Offsite receptors Flora	Unlikely given the history of the site which shows no previous development	Low	Very Low
2	Asbestos containing materials (ACM) in made ground soils associated with the development of the adjoining area	Fibre Inhalation	Construction workers Future occupants (adults & infants) Offsite receptors	Unlikely given the history of the site which shows no previous development	Severe (ACM)	Vert Low
3	Inhalation of vapours	Inhalation	Future residents	Unlikely given the history of the site which shows no previous	Low	Very Low

				development		
4	Inhalation of ground gases from onsite or offsite sources associated with the in-filling of nearby chalk pits etc.	Inhalation	Future residents	Unlikely given absence of evidence of potential gassing sources	Low	Very Low
5	pH & Sulphate attack on concrete	Future building	Future building	Potential natural sources may be present and should be investigated by intrusive investigation	Mild	Moderate / Low
6	Mobile contaminants: Petroleum hydrocarbons BTEX compounds	Surface runoff Migration through permeable strata & preferable pathways	Groundwater aquifer Future residents Offsite receptors Flora	Unlikely given the history of the site which shows no previous development	Low	Very Low
7	Organic contamination	Direct contact with water mains	Potable water supply	Unlikely given the history of the site which shows no previous development	Medium	Very Low
8	Agricultural chemicals - Pesticides and herbicides	Soil / soil dust ingestion	Construction workers Future occupants (adults & infants) Offsite receptors Flora & fauna	ppp	Likely	Severe

7.2.2 The contaminants of concern associated with those risks which require intrusive investigation were researched by reference to published industry profiles and are summarised overleaf:

Table 11: Summary of Contaminants of Concern based on PCM

SOURCE	LINKAGE No.	METALS	NON-METALS	ORGANICS	GASES	OTHERS
Aggressive natural contaminants in soils	PL5		Sulphates, pH			-
Pesticides / herbicides	PL8			Pesticides / herbicides		
Summary Suite	PL1-PL8		pH, sulphates	Pesticides / herbicides		Asbestos

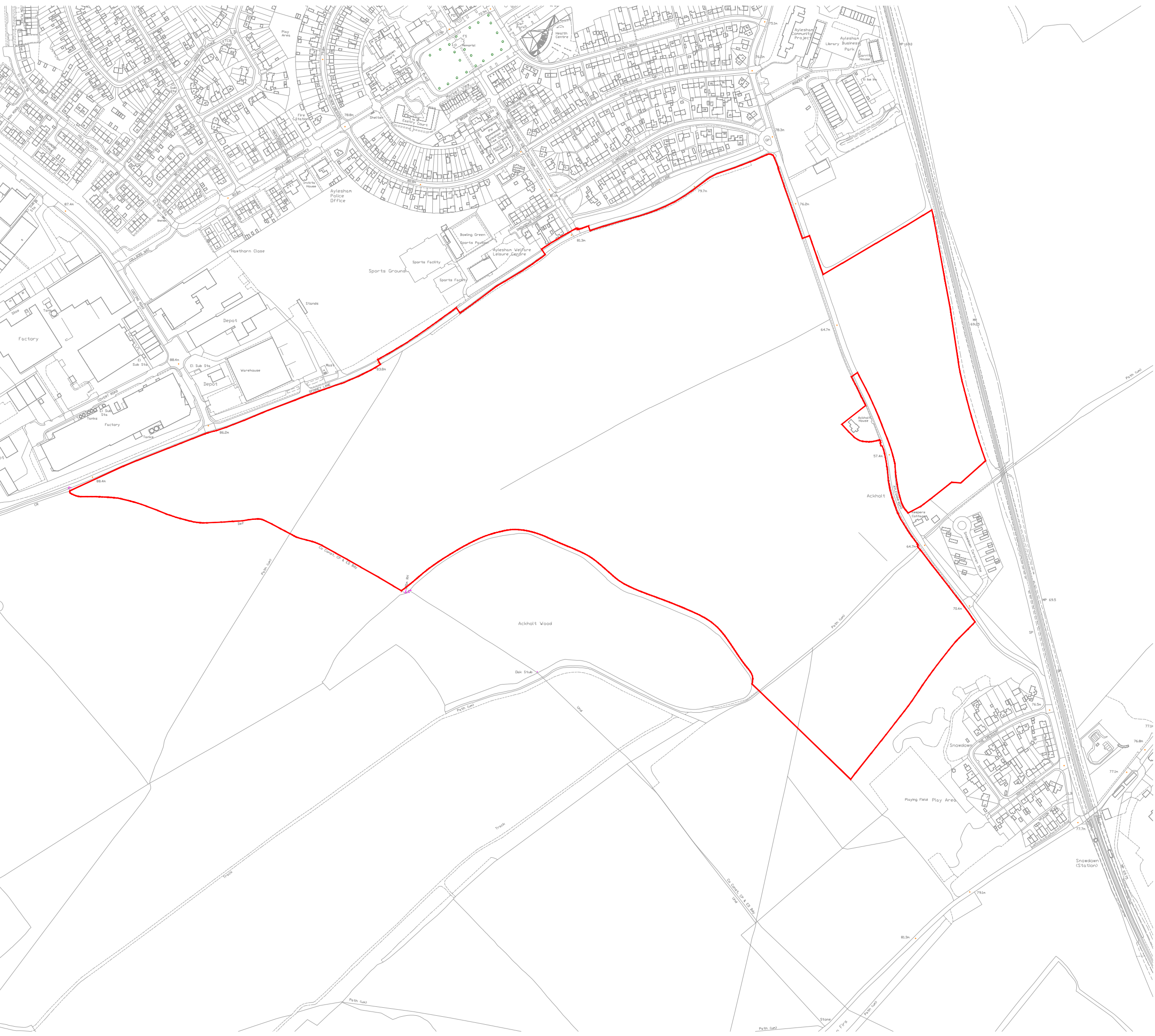
7.3 Summary of Pollutant Linkages / Preliminary Conceptual Model / Proposed Intrusive Investigation

7.3.1 Pollutant linkages potentially exist between each identified contamination source and each identified receptor as illustrated in the Preliminary Conceptual Model summarised in Table 12 below:

Table 12: Summary of Potential Pollutant Linkages / Preliminary Conceptual Model

SOURCE	RECEPTOR	PATHWAY	LIKELIHOOD OF PRESENCE AND RECOMMENDED FURTHER ACTION
Soil contamination as listed in Pollutant Linkage 5 and Pollutant Linkage 8 of Table 10	Building fabric Construction workers Future occupants (adults & infants) Offsite receptors Flora & fauna	Direct contact with aggressive soils Soil / soil dust ingestion	Considering the context setting of the site and its continuous historical land use as agricultural land, it is concluded there is a significant potential pollution linkage arising from the probable use of agricultural chemicals – pesticides, herbicides, fertilisers and hence an intrusive investigation is strongly recommended. The Phase 2 environmental investigation may be combined with a geotechnical assessment required for the design of house foundations, highway pavement design etc. Following the investigation, a full remedial options appraisal should be prepared in accordance with LCRM guidance.

APPENDIX 1
DRAWINGS



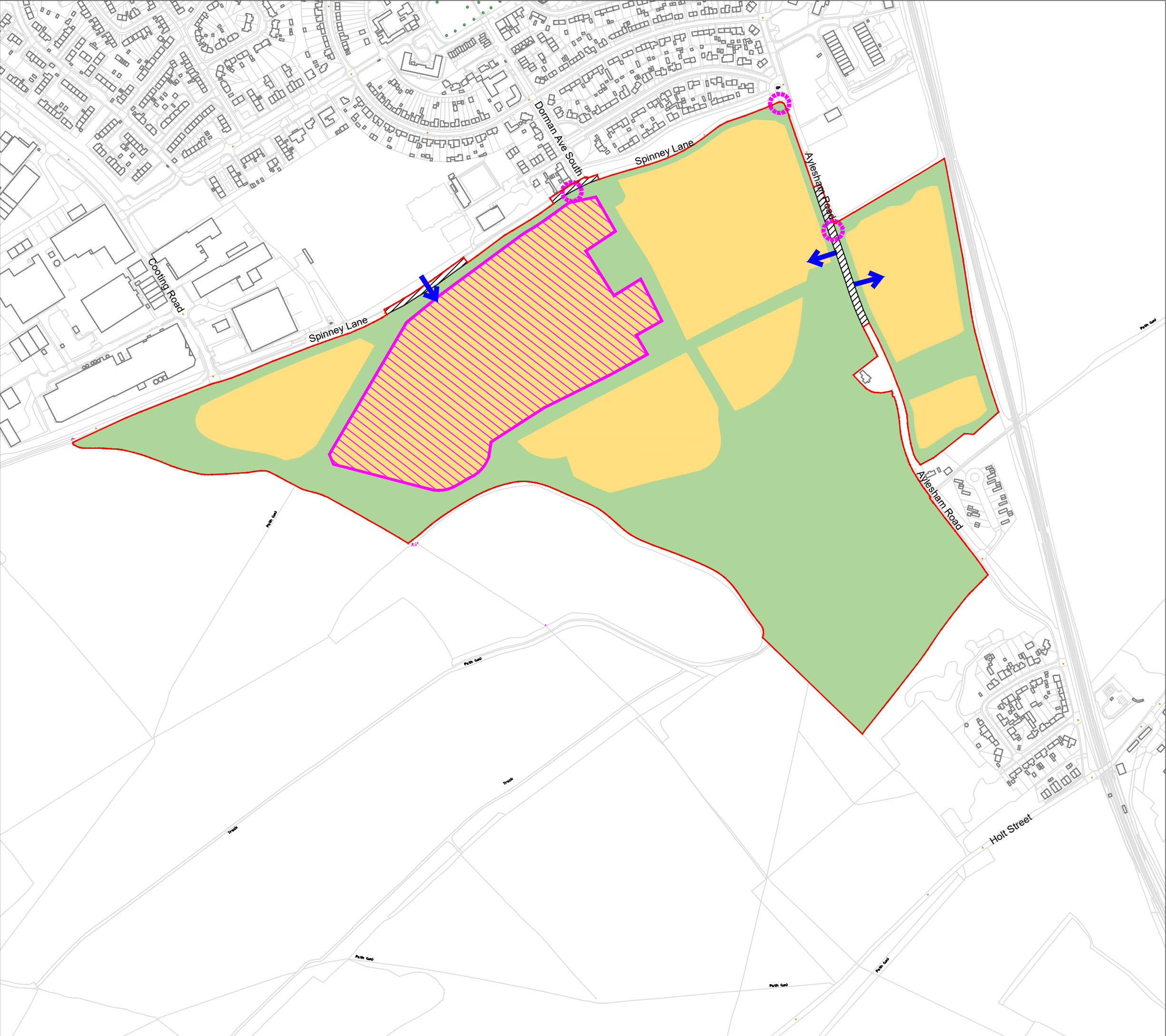
Site boundary



Project
Land to the South of Aylesham

Drawing Title
Site Location Plan

Date	Scale	Drawn by	Check by
05/12/2024	1:5,000 at A3	JB/JL	SR
Project No	Drawing No	Revision	
1284	001	D	



-  Site boundary
-  Residential uses including access roads, footpaths, cycle paths, private garden space, car parking, green corridors, incidental open spaces, landscaping, children's play areas, utility infrastructure and sustainable drainage systems (SuDS)
-  Mixed use building zone extends to include Use Class E, F.2 (as secured and subject to section 106 agreement) and residential uses including access roads, footpaths, cycle paths, private garden space, car parking, green corridors, incidental open spaces, landscaping, children's play areas, utility infrastructure and sustainable drainage systems (SuDS)
-  Green infrastructure including amenity greenspace, play space, allotments, community orchards, SUDS, access roads and utilities (refer to Green Infrastructure Parameter Plan drawing no. 005-05)
-  Road extents
-  Vehicular & pedestrian access points
-  Zone for pedestrian crossing points (refer to Detailed Plans)



Project
Land to the South of Aylesham

Drawing Title
Land Use Parameter Plan

Date	Scale	Drawn by	Check by
18/12/2024	1:5,000 at A3	JL/JB	SR
Project No	Drawing No	Revision	
1284	005-01	B	



Key

Site boundary

01 Vehicular access point

02 Pedestrian crossing

03 Sustainable drainage feature

04 Retained and enhanced vegetation

05 Tree belt and copse planting

06 Community orchard/garden

07 Allotments and associated parking

08 Village green

09 Destination children's play area

10 Species-rich grassland and meadow planting

11 Mixed-use local centre

12 Multi-functional green corridor with opportunities for play, community gardens, orchards, and the cultivation of edible trees and plants

13 Public right of way

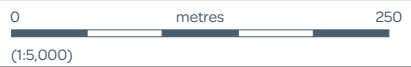
14 Five-a-side kickabout area

15 Pedestrian crossing point

16 Cycle, pedestrian and emergency access

Cycle and pedestrian path

Pedestrian path



CLIENT:
Axis Land

PROJECT:
Land to the South of Aylesham

DRAWING:
Illustrative masterplan

PROJECT NUMBER:
1284

DRAWING NUMBER: SK003

CHECKED BY: SR

REVISION: v7

STATUS: Final

DATE: 13/01/2025

SCALE: 1:5,000