



South East Strategic Reservoir Option (SESRO)

Technical Supporting Document B2
Terrestrial Environmental Appraisal Report

Figures

Notice

Position Statement

This document has been produced as the part of the process set out by RAPID for the development of the Strategic Resource Options (SROs). This is a regulatory gated process allowing there to be control and appropriate scrutiny on the activities that are undertaken by the water companies to investigate and develop efficient solutions on behalf of customers to meet future drought resilience challenges.

This report forms part of suite of documents that make up the 'Gate 2 submission.' That submission details all the work undertaken by Thames Water and Affinity Water in the ongoing development of the proposed SROs. The intention of this stage is to provide RAPID with an update on the concept design, feasibility, cost estimates and programme for the schemes, allowing decisions to be made on their progress and future funding requirements.

Should a scheme be selected and confirmed in the companies' final Water Resources Management Plan, in most cases it would need to enter a separate process to gain permission to build and run the final solution. That could be through either the Town and Country Planning Act 1990 or the Planning Act 2008 development consent order process. Both options require the designs to be fully appraised and in most cases an environmental statement to be produced. Where required that statement sets out the likely environmental impacts and what mitigation is required.

Community and stakeholder engagement is crucial to the development of the SROs. Some high level activity has been undertaken to date. Much more detailed community engagement and formal consultation is required on all the schemes at the appropriate point. Before applying for permission Thames Water and Affinity Water will need to demonstrate that they have presented information about the proposals to the community, gathered feedback and considered the views of stakeholders. We will have regard to that feedback and, where possible, make changes to the designs as a result.

The SROs are at a very early stage of development, despite some options having been considered for several years. The details set out in the Gate 2 documents are still at a formative stage and consideration should be given to that when reviewing the proposals. They are for the purposes of allocating further funding not seeking permission.

Disclaimer

This document has been written in line with the requirements of the RAPID Gate 2 Guidance and to comply with the regulatory process pursuant to Thames Water's and Affinity Water's statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented in this document be taken forward, Thames Water and Affinity Water will be subject to the statutory duties pursuant to the necessary consenting process, including environmental assessment and consultation as required. This document should be read with those duties in mind.

Legend

- Existing:**

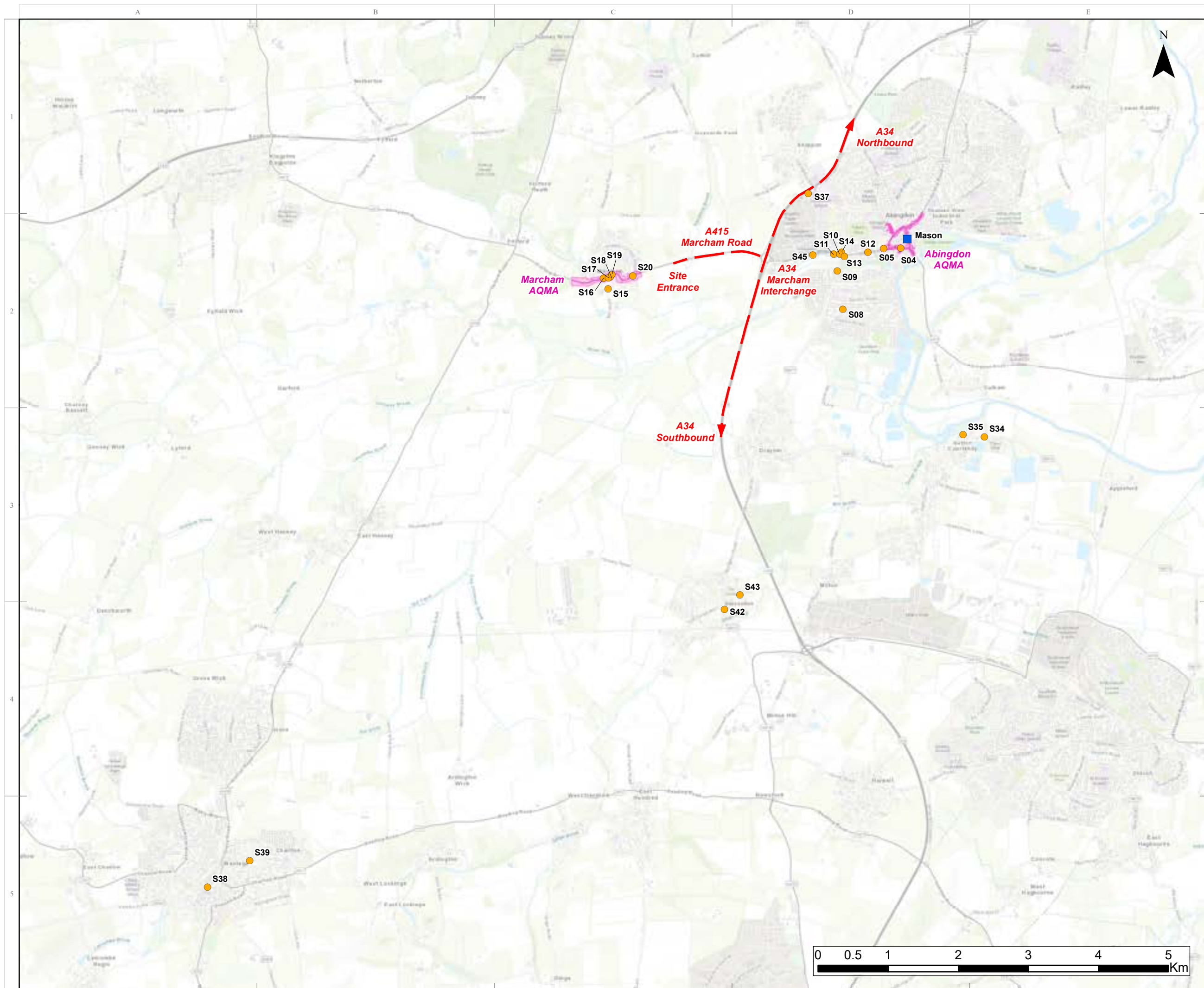
 - Public Rights of Way
 - Woodland to be Retained as far as Practicable
 - Watercourse to be Retained

Proposed:

 - Reservoir Water Extent
 - Crest of Reservoir Embankment
 - Inner Toe of Reservoir Embankment and Borrow Pit Contours
 - Indicative Embankment and Bund Contours
 - Corridor for Future Canal Diversion
 - Public Rights of Way
 - Indicative Vantage Point with Seating Area for Views towards AONB and Midvale Ridge
 - Car Park with Hardstanding
 - Car Park with Reinforced Grass
 - Visitor / Community Centre
 - Cafe
 - Education Centre
 - Sailing Clubhouse
- Proposed:**

 - Indicative Replacement Floodplain Storage
 - Auxiliary Drawdown Channel Water Extent
 - Watercourse Diversion
 - Watercourse Realignments
 - Wetland Ditch
 - Perimeter Ditch
 - Wetland Habitat Mosaic with Reeds, Species Rich Wet Grassland and Floodplain Marsh
 - Floating Islands
 - Ecology Ponds and Lakes with Marginal Planting
 - Hedgerow with Intermittent Standard Trees
 - Hedgerow and Tree Belt to be Retained as far as Practicable and Enhanced
 - Pasture for Sheep Grazing
 - Species Rich Neutral Grassland
 - Scrub
 - Intermittent Trees and Shrubs
 - Woodland and Copse
 - Wet Woodland
 - Land to be Reinstated and Returned to Agriculture
 - Land to be Reinstated to Existing Use





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NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES UNLESS SHOWN OTHERWISE

Legend

- Diffusion tube monitoring locations
- Automatic monitoring location
- Proposed construction traffic route
- Air Quality Management Area (AQMA)

NOT FOR CONSTRUCTION

CURRENT REVISION INFORMATION

[illegible]

Location Code:	OS Reference:	Security Reference:
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Project Group:	Sub Process:
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Location/Town: Abingdon

Site Name: SESRO

Project Name: South East Strategic Reservoir Option (SESRO)

Drawing Title:
**FIGURE 3.1: MONITORING LOCATIONS, AIR
QUALITY MANAGEMENT AREAS AND PROPOSED
CONSTRUCTION TRAFFIC ROUTE**

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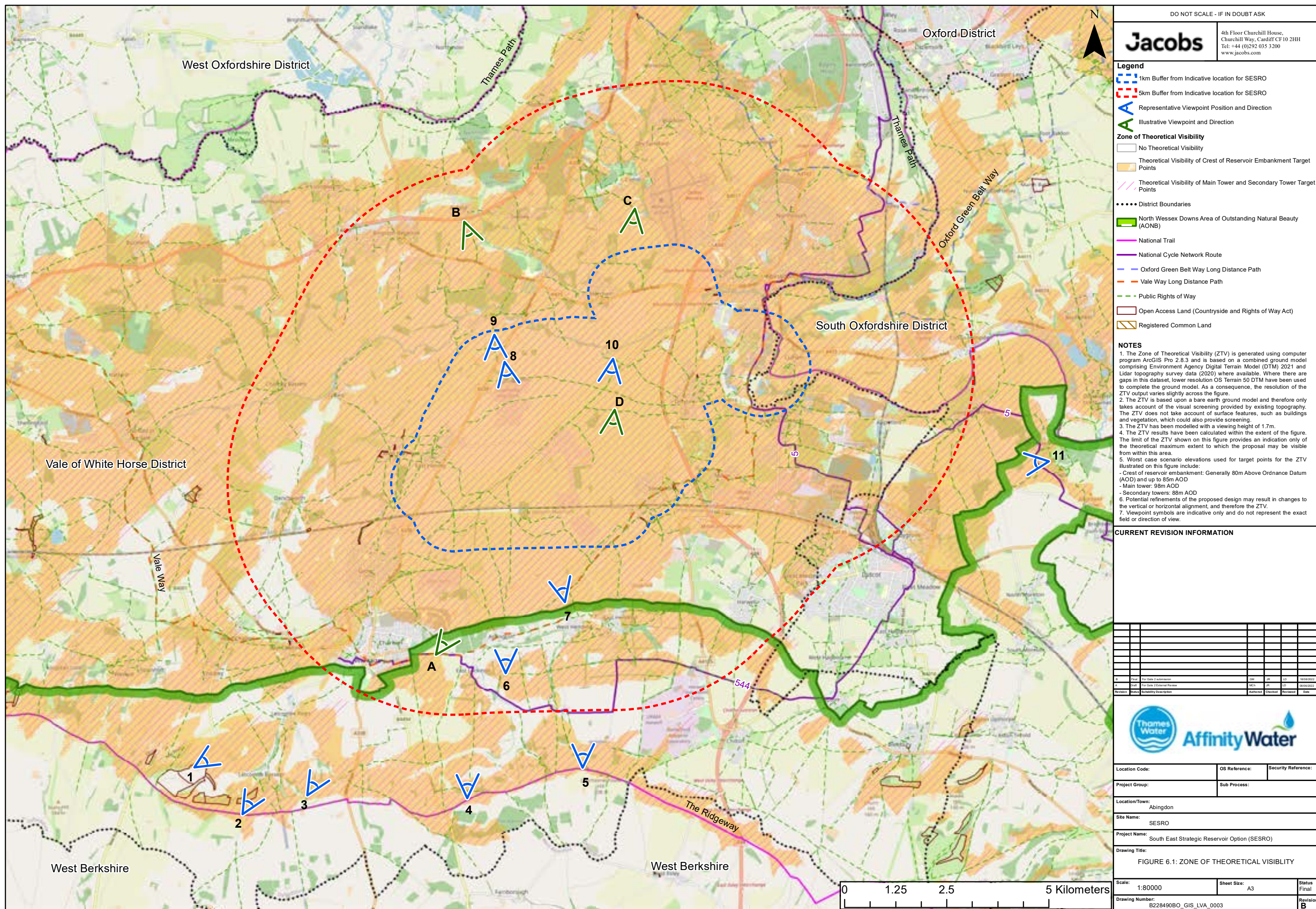
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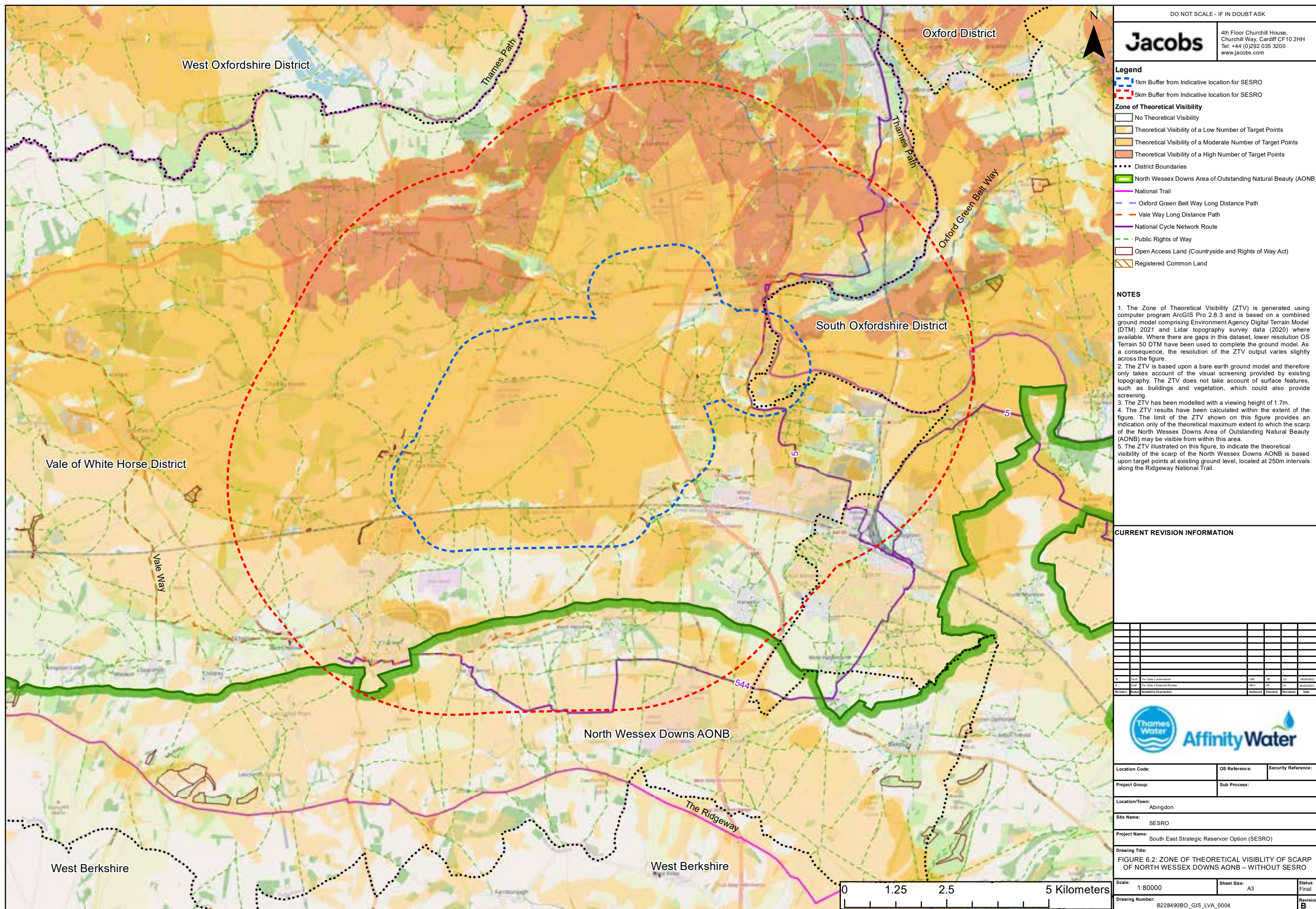
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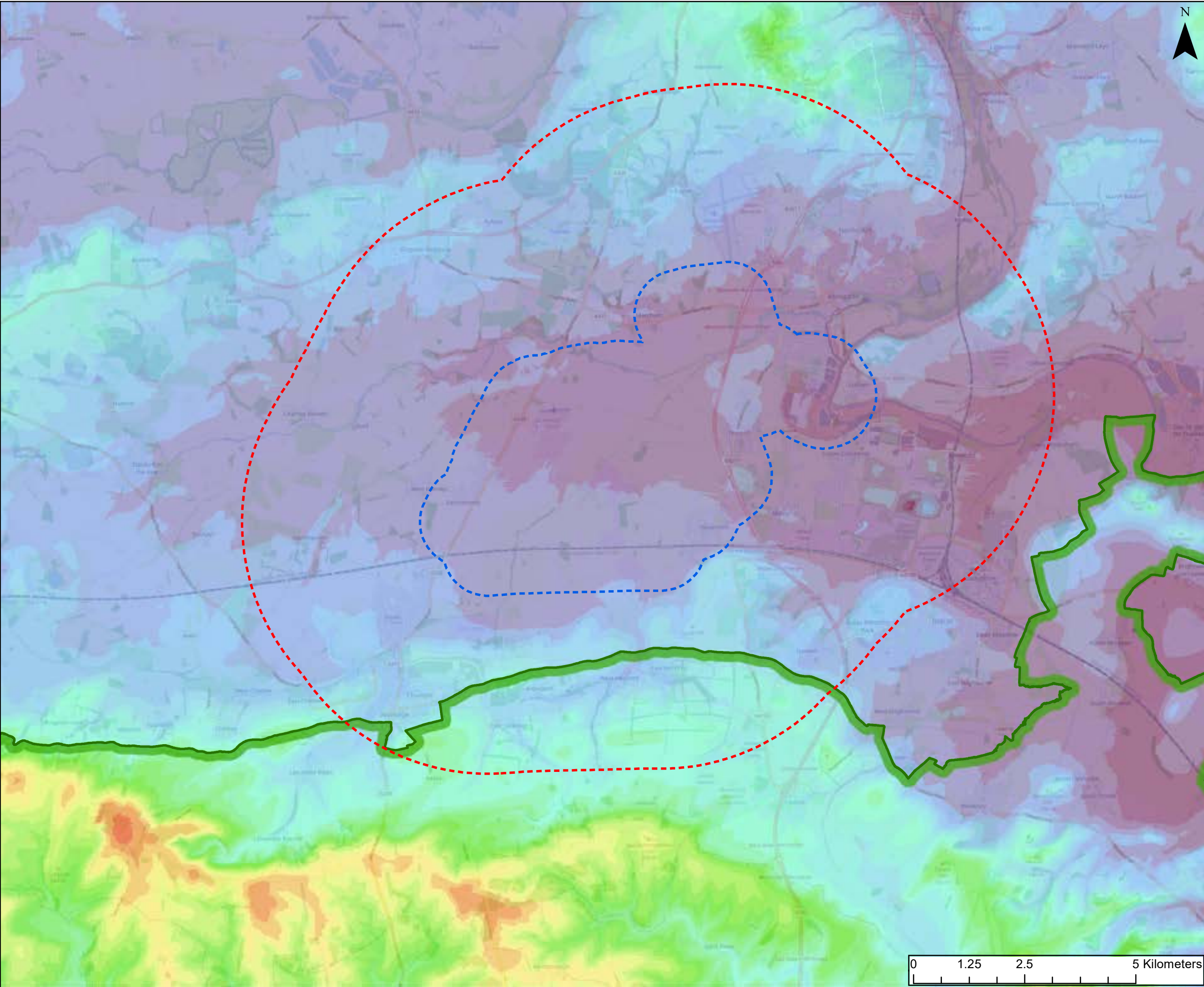
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Legend

1km Buffer from Indicative location for SESRO

5km Buffer from Indicative location for SESRO

North Wessex Downs Area of Outstanding Natural Beauty (AONB)

Elevation in metres

37 - 40

41 - 50

51 - 60

61 - 70

71 - 80

81 - 90

91 - 100

101 - 110

111 - 120

121 - 130

131 - 140

141 - 150

151 - 160

161 - 170

171 - 180

181 - 190

191 - 200

201 - 210

211 - 220

221 - 230

231 - 240

241 - 250

251 - 260

CURRENT REVISION INFORMATION

Rev	Date	For	By	Check	Drawn	Scale	Unit	Notes
1	08/06/2022	Final	JM	JS	LD	1:80000	A3	17/08/2022
2	08/06/2022	For Data 2 External Review	MC	JS	LD	1:80000	A3	18/06/2022

Thames Water

Affinity Water

Location Code:

OS Reference:

Security Reference:

Project Group:

Sub Process:

Location/Town:

Abingdon

Site Name:

SESRO

Project Name:

South East Strategic Reservoir Option (SESRO)

Drawing Title:

FIGURE 6.4: TOPOGRAPHY

Scale:

1:80000

Sheet Size:

A3

Status:

Final

Drawing Number:

B228490BO_GIS_LVA_0006

Revision:

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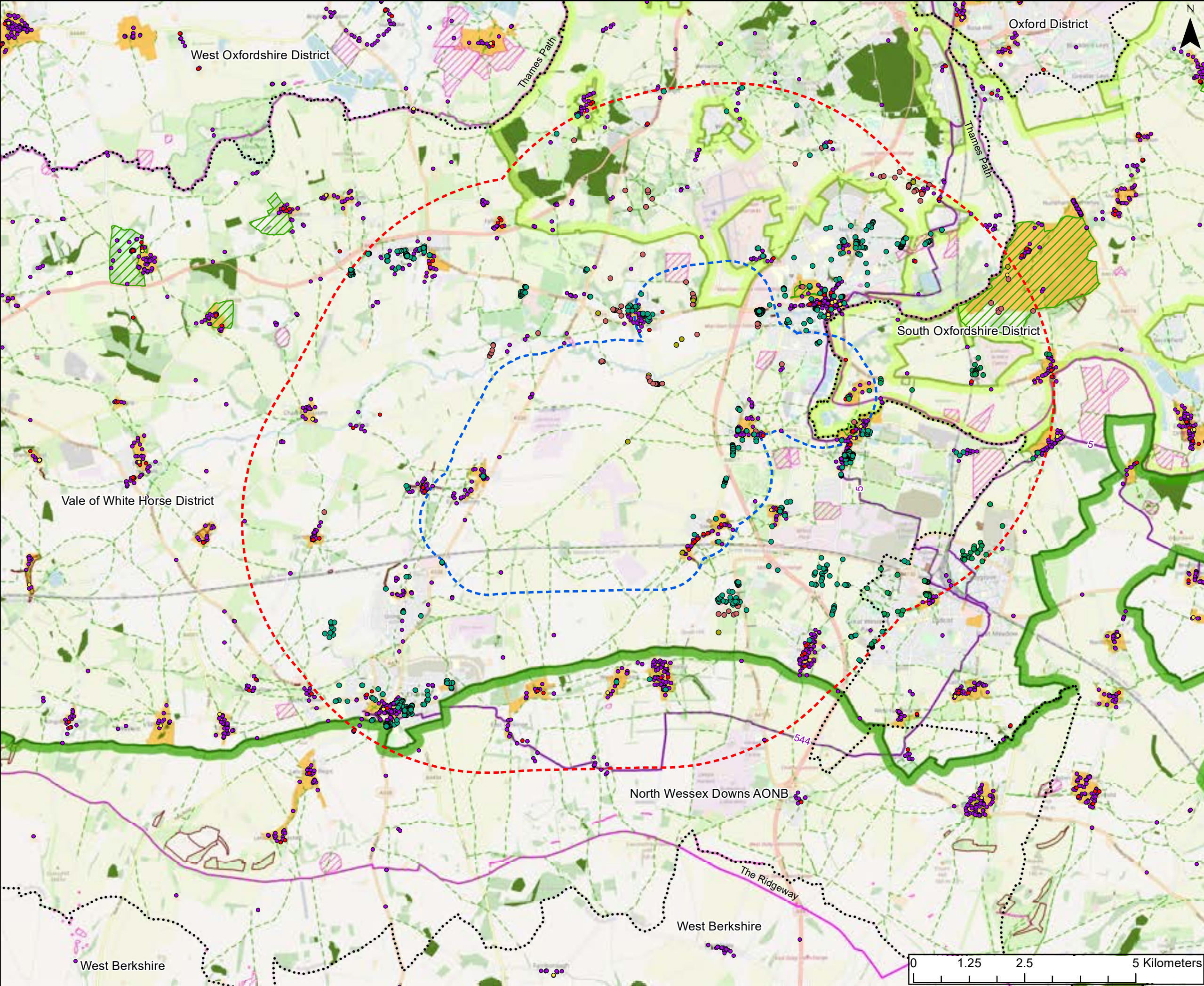
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Legend

1km Buffer from Indicative location for SESRO

5km Buffer from Indicative location for SESRO

District Boundaries

North Wessex Downs Area of Outstanding Natural Beauty (AONB)

Oxford Green Belt

Tree Preservation Order (individual tree)

Tree Preservation Order (group of trees)

Ancient Woodland

Ancient Tree

Veteran Tree

National Trail

National Cycle Network Route

Public Rights of Way

Open Access Land (Countryside and Rights of Way Act)

Registered Common Land

Scheduled Monument

Registered Park and Garden

Conservation Area

Grade I Listed Building

Grade II* Listed Building

Grade II Listed Building

CURRENT REVISION INFORMATION

Rev	Date	By	For	Description	Author	Checked	Reviewed	Date
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Thames Water

AffinityWater

Location Code:

OS Reference:

Security Reference:

Project Group:

Sub Process:

Location/Town:

Abingdon

Site Name:

SESRO

Project Name:

South East Strategic Reservoir Option (SESRO)

Drawing Title:

FIGURE 6.5 LANDSCAPE CONTEXT AND PLANNING CONSTRAINTS

Scale:

1:80000

Status

Final

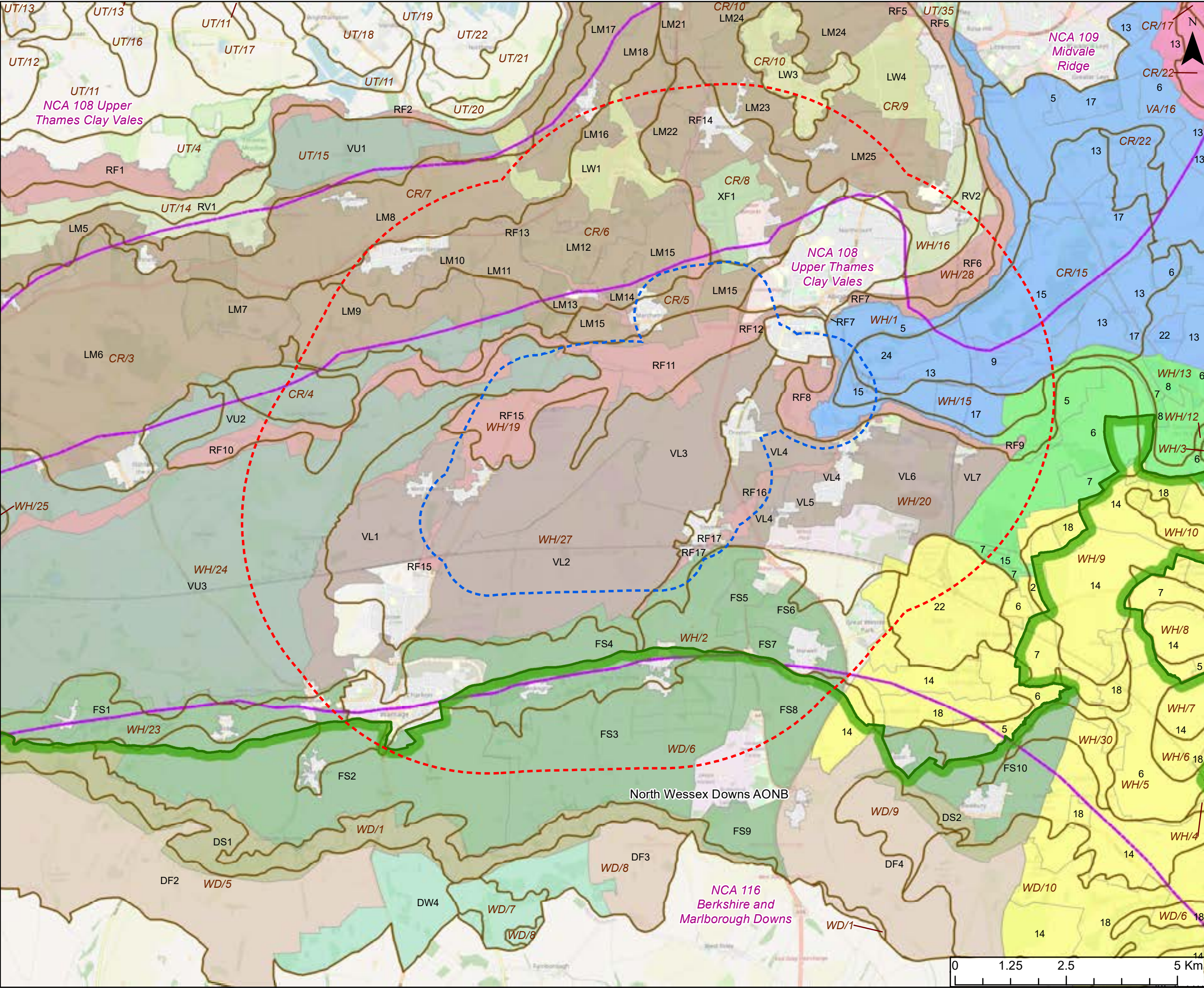
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Revision

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Legend

1km Buffer from Indicative location for SESRO

5km Buffer from Indicative location for SESRO

North Wessex Downs Area of Outstanding Natural Beauty (AONB)

National Character Areas

The Oxfordshire Wildlife and Landscape Study Landscape Character Areas

Vale of White Horse District Landscape Character Assessment

Landscape Character Types (Landscape Character Area reference annotated on plan)

DF - Downs Open Farmland

DS - Downs Scarp

DW - Downs with Woodland

FS - Downs Foothills

LM - Limestone Ridge with Woodland

LW - Wooded Limestone Ridge

RF - River Floodplain

RV - River Valley Floor

VL - Lower Vale Farmland

VU - Upper Vale Farmland

XF - Former Airfield

South Oxfordshire Landscape Character Assessment

Landscape Character Areas

Oxford Heights

Nuneham Courtenay Ridge

River Thames Corridor

Wessex Downs and Western Vale Fringes

Landscape Character Types

2. Amenity Landscapes

5. Flat floodplain pasture

6. Flat open farmland

7. Flat, semi-enclosed farmland

8. Floodplain wetland

9. Institutions

13. Open farmed hills and valleys

14. Open rolling downs

15. Parkland and estate farmland

17. Semi-enclosed farmed hills and valleys

18. Semi-enclosed rolling downs

22. Urban areas

24. Wooded hills and valleys

North Wessex Downs AONB Integrated Landscape Character Assessment

Data set unavailable for reproduction. Available online at:
<https://www.northwessexdowns.org.uk/downloadable-resources/>

CURRENT REVISION INFORMATION

Rev	Date	Description	Author	Checked	Reviewed	Date
1	08/06/2022	Initial	GM	JS	LD	08/06/2022
2	08/06/2022	For Data 2 Submission	GM	JS	LD	08/06/2022
3	08/06/2022	For Data 2 External Review	GM	JS	LD	08/06/2022

Thames Water

Affinity Water

Location Code: OS Reference: Security Reference:

Project Group: Sub Process:

Location/Town: Abingdon

Site Name: SESRO

Project Name: South East Strategic Reservoir Option (SESRO)

Drawing Title: FIGURE 6.6 PUBLISHED LANDSCAPE CHARACTER TYPES AND AREAS

Scale: 1:80000 Sheet Size: A3 Status: Final

Drawing Number: B228490BO_GIS_LVA_0008 Revision: B

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