

KEY:

Existing Surface Water Network

Existing Foul Water Network

Proposed Surface Water Network

Proposed Foul Water Network

Proposed Road gully and connection

Proposed Highway Verge SUDS Feature

Proposed Culvert

Proposed Pre-cast Concrete Headwall

Proposed road contours (major at 200mm intervals, minor at 50mm intervals)

Proposed basin contours (major at 500mm intervals, minor at 100mm intervals)

Existing Utilities

33KV Existing 33KV Overhead HV Cable

132KV Existing 132KV Overhead HV Cable

HV-OH Unspecified Overhead HV Cable

Overhead HV 15m Clearance

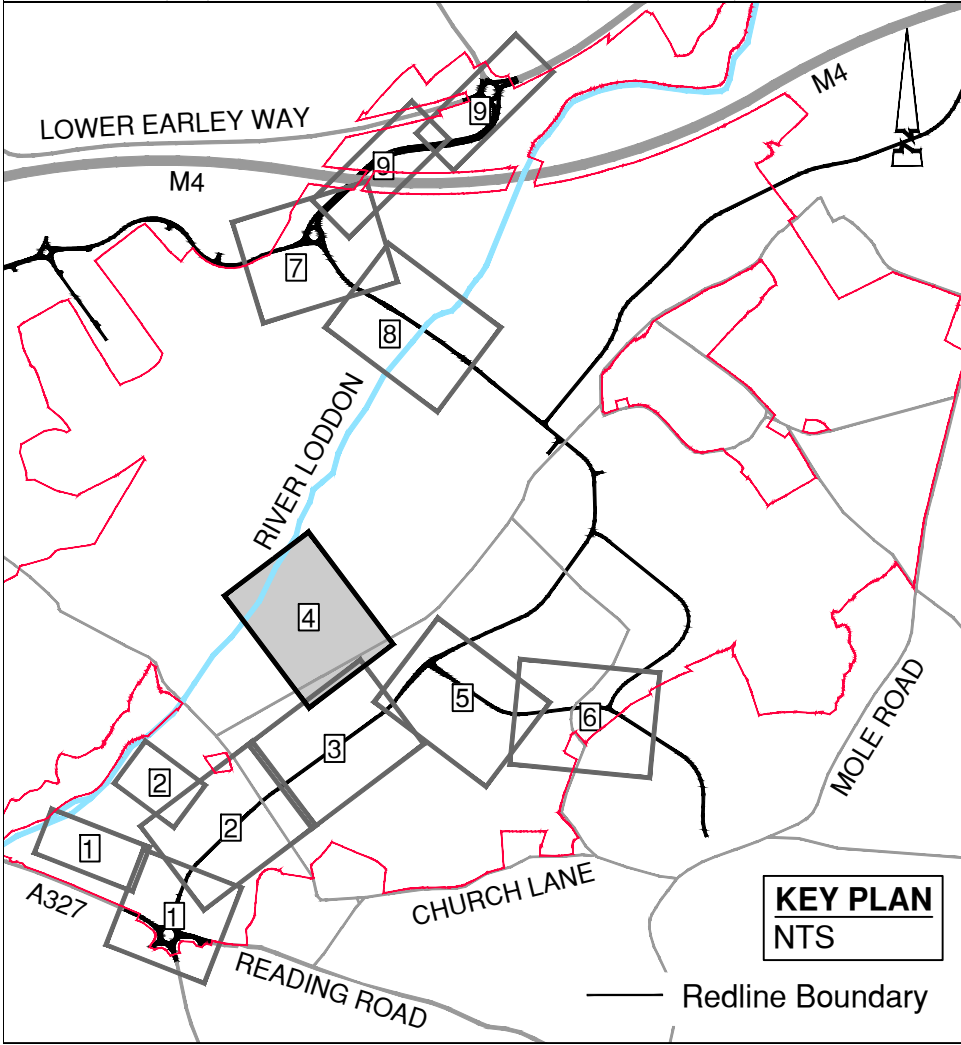
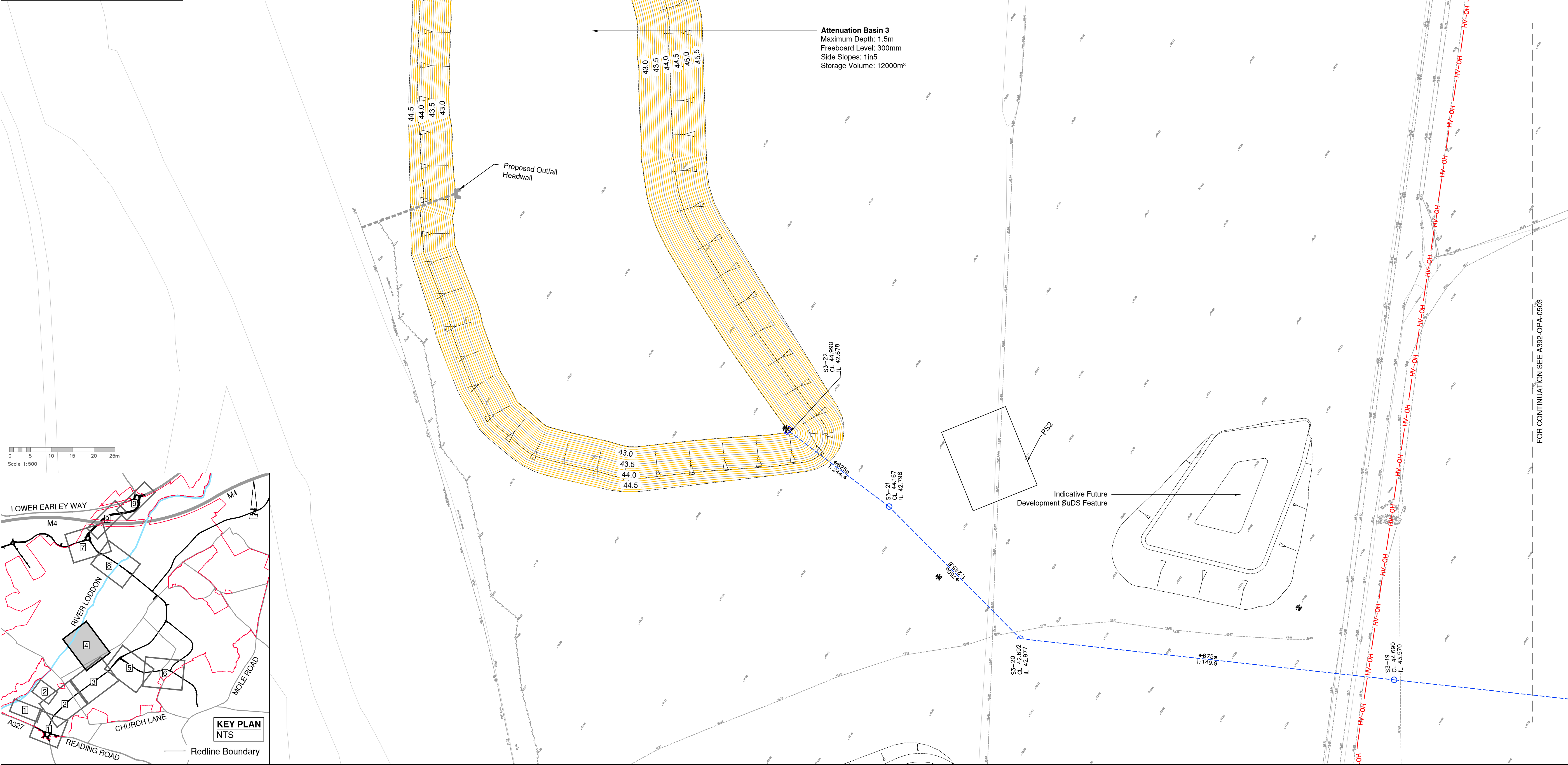
Pylon 20m Clearance

HP Existing High Pressure Gas

MP Existing Medium Pressure Gas

IP Existing Low Pressure Gas

Existing Gas 3m Clearance



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DRAINAGE NOTES:

1. Do not scale.

2. Refer to all other Project Drawings and supporting notes.

3. All adoptable drainage works to be constructed as detailed in the Water Authorities Addendum.

4. All public sewers are to be the subject of a Section 104 agreement of the Water Industry Act 1991.

5. Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.

6. The Contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.

7. All drainage ironworks to comply with BS EN124, and be stamped with BSI Kitemark. Covers to suit loading as below:

- Carriageways and Roads - D400
- Driveways and Verges - C250
- Footways and Pedestrian Areas - B125
- Gardens/Landscaping - A15

8. All sewer pipes, up to, and including 600mm are to be vitrified clay or PVC-U to BS EN295 and BS EN1404 respectively. All sewer pipes 675mm diameter and above to be concrete pipes to BS EN1916.

9. All drainage shall be installed and tested strictly in accordance with the Manufacturers' printed instructions, BS EN 752, BS EN 1601, Local Water Authority requirements and the Building Regulations.

10. All bedding shall be Class S unless noted otherwise.

11. All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.

12. Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.

13. Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.

14. The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.

15. All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.

16. All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the Engineer.

17. All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with Document H of the Building regulations, together with NHBC Standards Chapter 5.3 and BS8301.

18. Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.

19. Where inverts are less than 0.6m deep inspection chambers (min dia. 190mm) or access fittings (225 x 100mm) to be used, elsewhere proprietary plastic, brick or pcc is to be used and sized in accordance with Table 11 of Document H of the Building Regulations [-0.6m to invert min DN300, >0.6m to invert min DN475].

20. All gullies connected direct to drains to be roddable.

21. Adequate precautions in accordance with Approved Document H and manufacturers's recommendations to be taken to protect drains (particularly plastic) at shallow depths.

22. Trees and shrubs of a large size or heavy canopy with a moderate or high water demand must not be planted within any sewer easement.

23. Gullies within and adjacent to area of site works to be suction cleansed at commencement and completion of works.

B	07.25	KEY PLAN REDLINE BOUNDARY UPDATED	CS	LPA
A	06.25	FIRST ISSUE	JJS	CS
Rev	Date	Description	Drawn	Checked

Abley Letchford

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Client

UNIVERSITY OF READING

Project

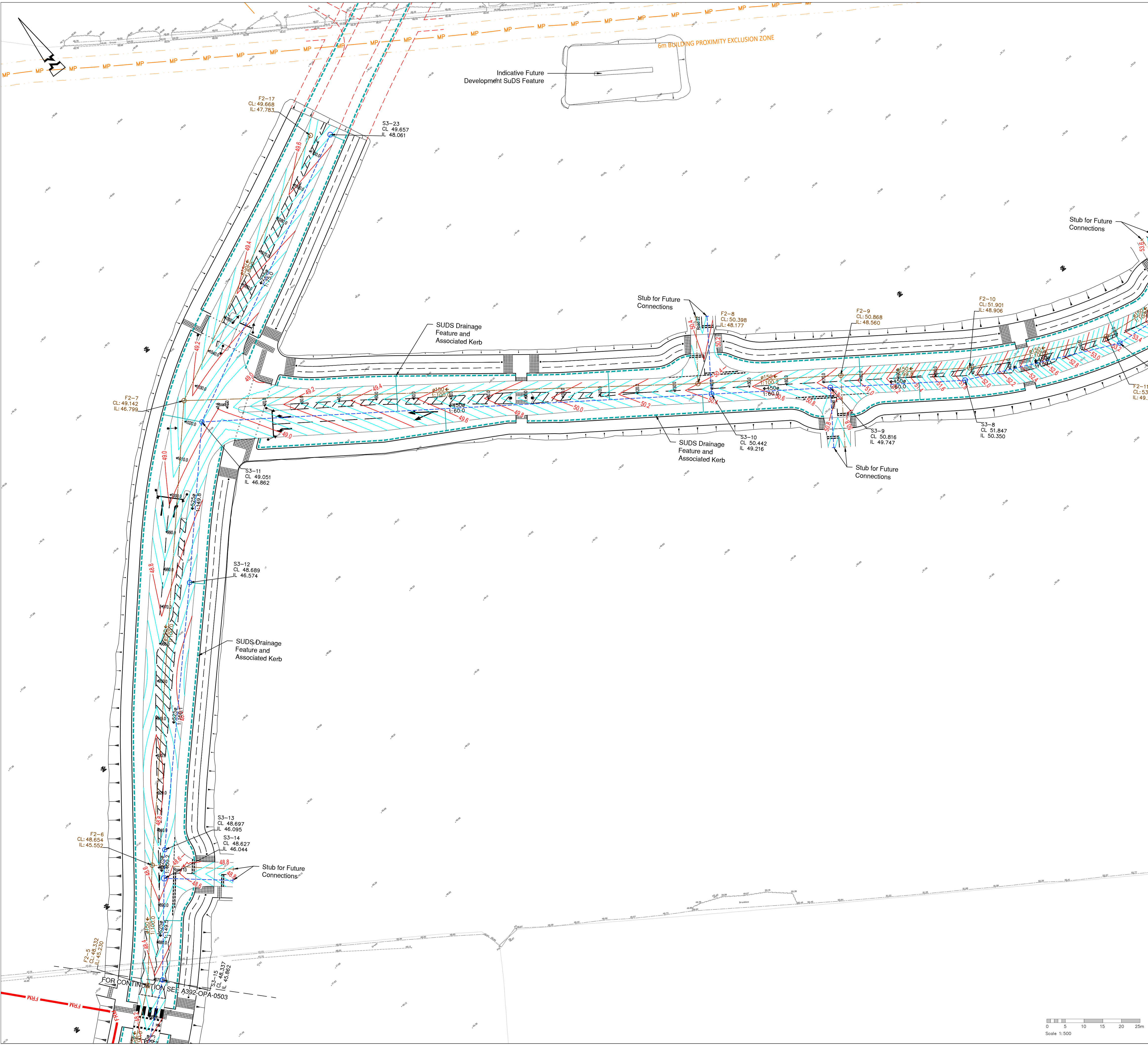
LODDON GARDEN VILLAGE

Title

DRAINAGE AND LEVELS
LAYOUT
SHEET 4 OF 9

Status

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS
Drawing No.	A392-OPA-0504		Revision
		B	

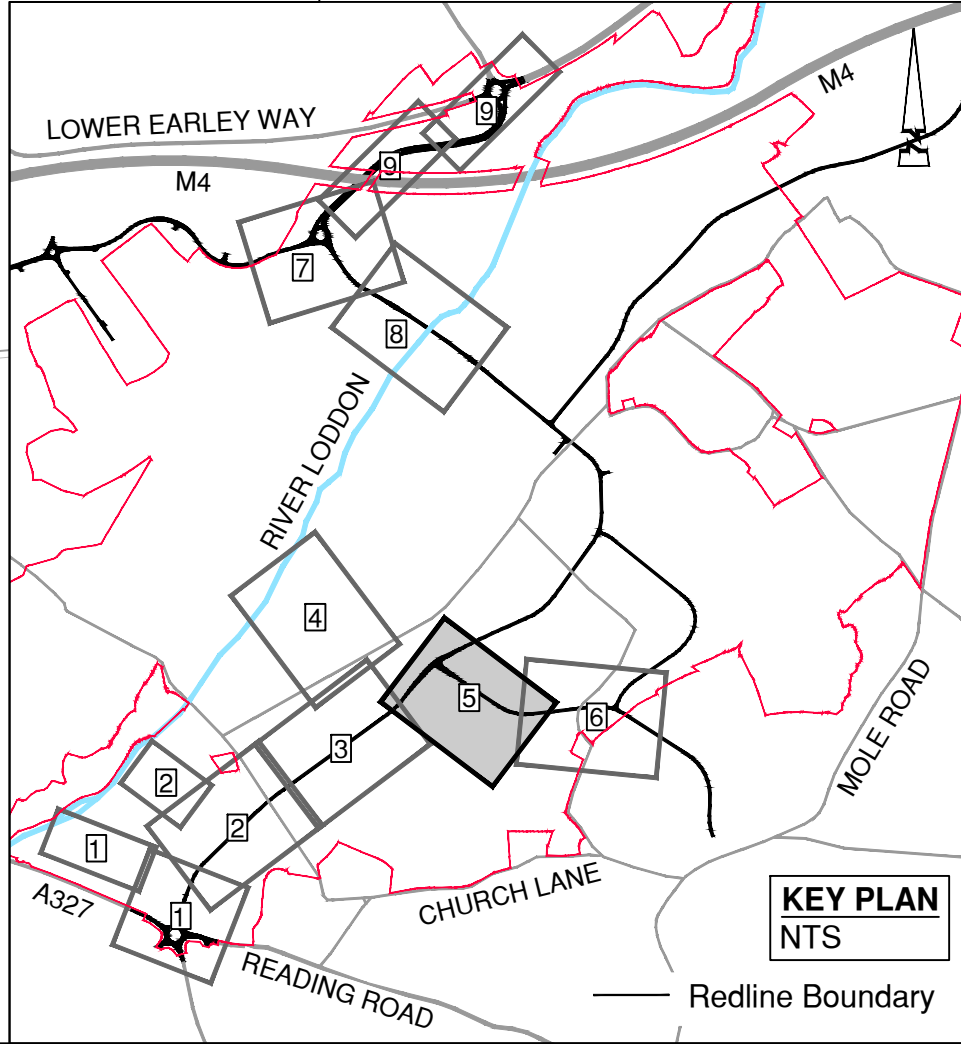


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- Where pipes pass through footings, retaining or screen walls, lintels to be provided over drains.
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- Gullies within and adjacent to area of site works to be suction cleansed at commencement and completion of works.

B	07.25	KEY PLAN REDLINE BOUNDARY UPDATED	CS	LPA
A	06.25	FIRST ISSUE	JJS	CS
Rev	Date	Description	Drawn	Checked

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Client: **UNIVERSITY OF READING**

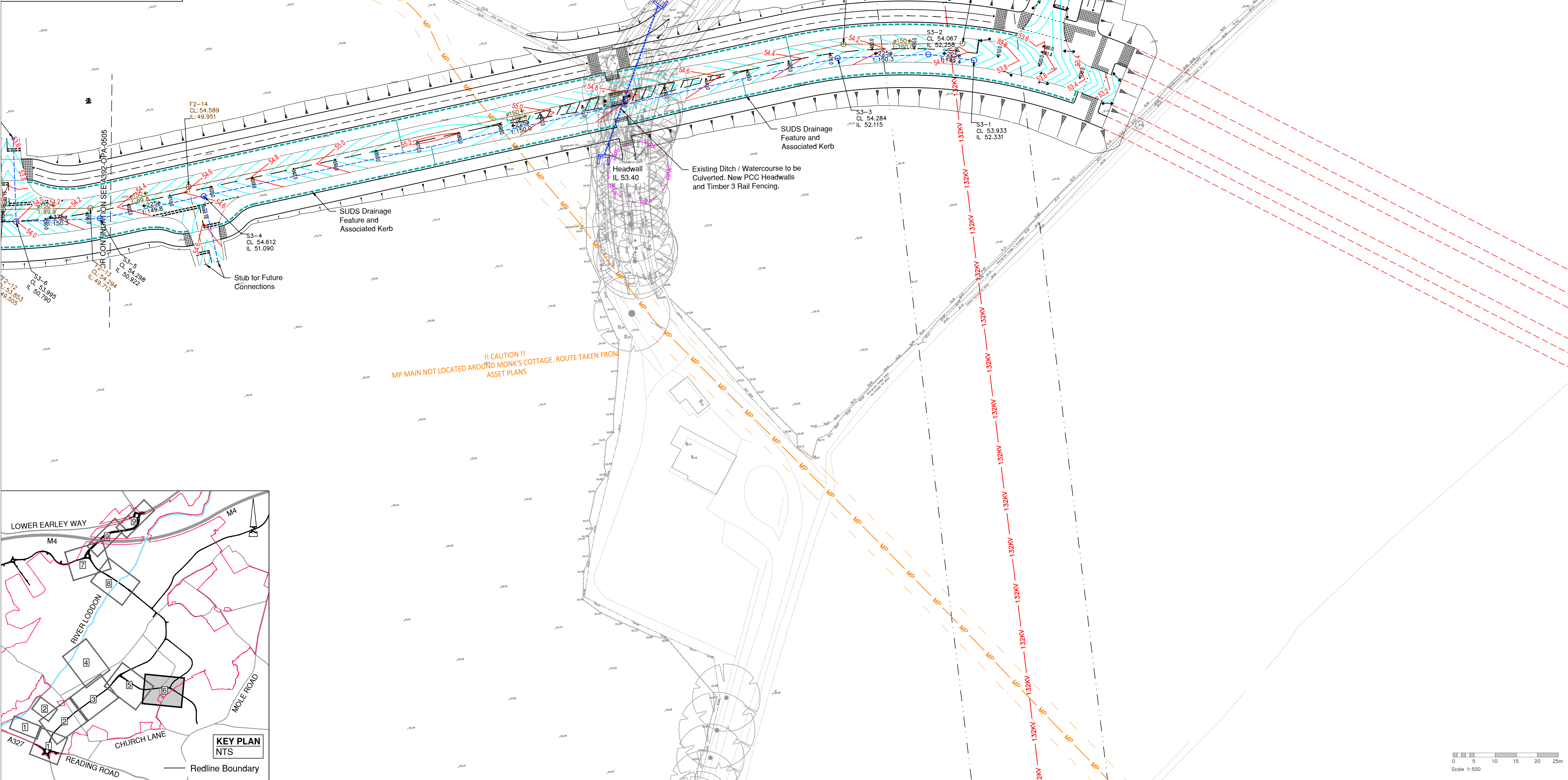
Project: **LODDON GARDEN VILLAGE**

Title: **DRAINAGE AND LEVELS LAYOUT SHEET 5 OF 9**

Status:

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS

Drawing No: **A392-OPA-0505** Revision: **B**

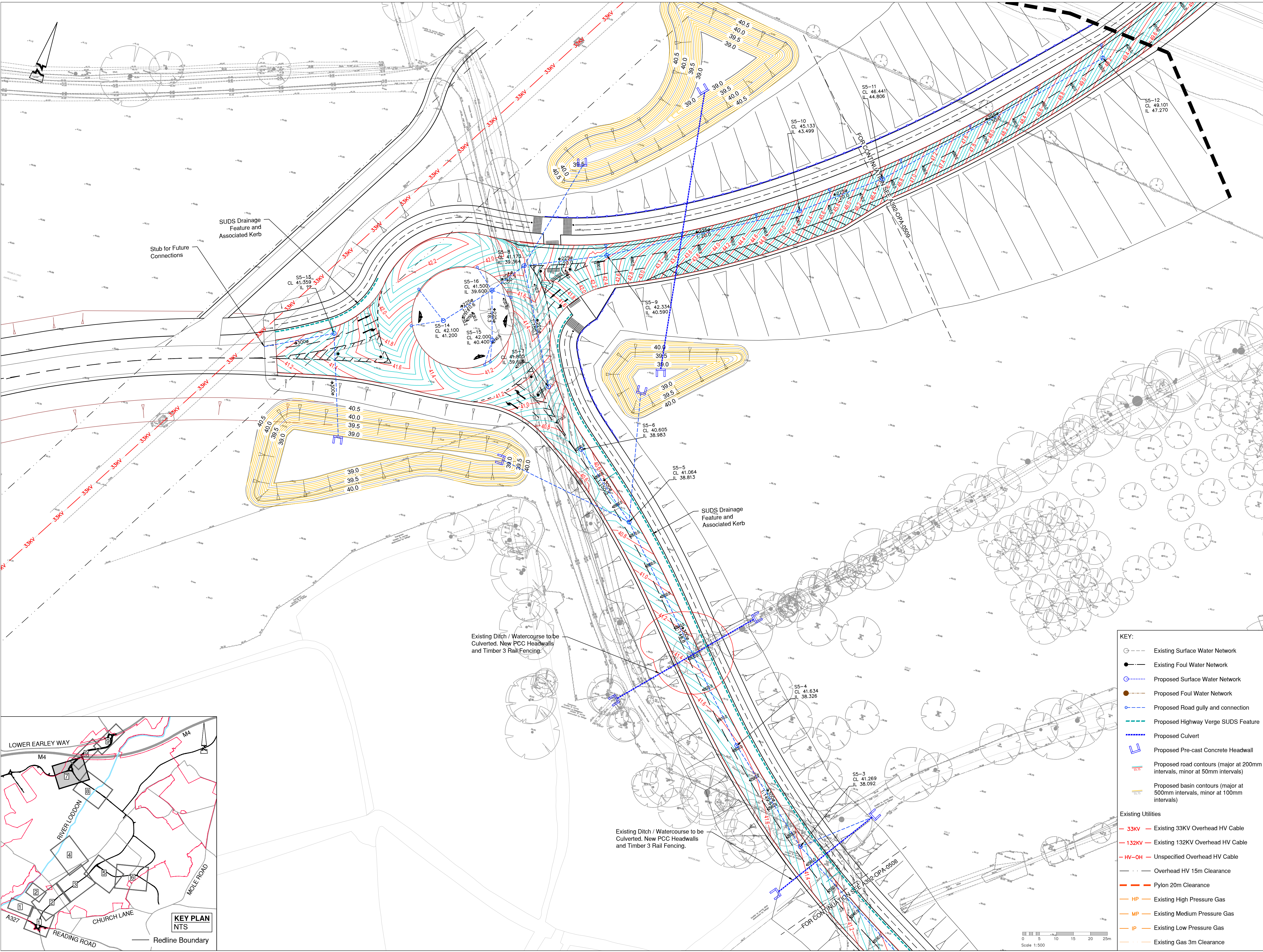


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| B | 07.25 | KEY PLAN REDLINE BOUNDARY UPDATED | | CS | LPA |
| A | 06.25 | FIRST ISSUE | | JJS | CS |
| Rev | Date | Description | | Drawn | Checked |
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| Client

UNIVERSITY OF READING | | | | | |
| Project

LODDON GARDEN VILLAGE | | | | | |
| Title

DRAINAGE AND LEVELS
LAYOUT
SHEET 6 OF 9 | | | | | |
| Status | | | | | |
| Scale | Date | Drawn | Checked | | |
| 1:500 @ A1 | JUNE 2025 | JJS | CS | | |
| Drawing No:
A392-OPA-0506 | | | Revision
B | | |



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B	07.25	KEY PLAN REDLINE BOUNDARY UPDATED	CS	LPA
A	06.25	FIRST ISSUE	JJS	CS
Rev	Date	Description	Drawn	Checked

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Project

LODDON GARDEN VILLAGE

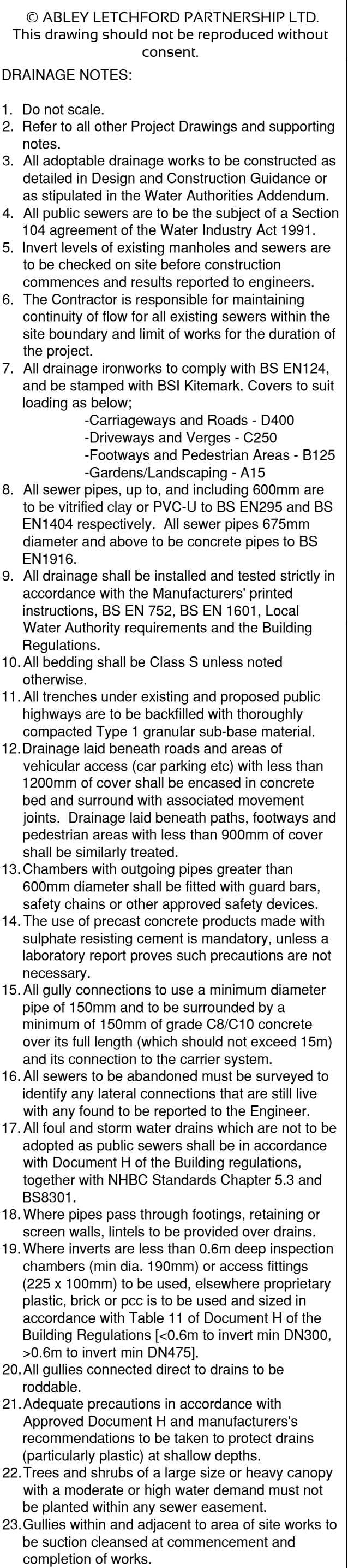
Title

DRAINAGE AND LEVELS
LAYOUT
SHEET 7 OF 9

Status

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS

Drawing No.	Revision
A392-OPA-0507	B



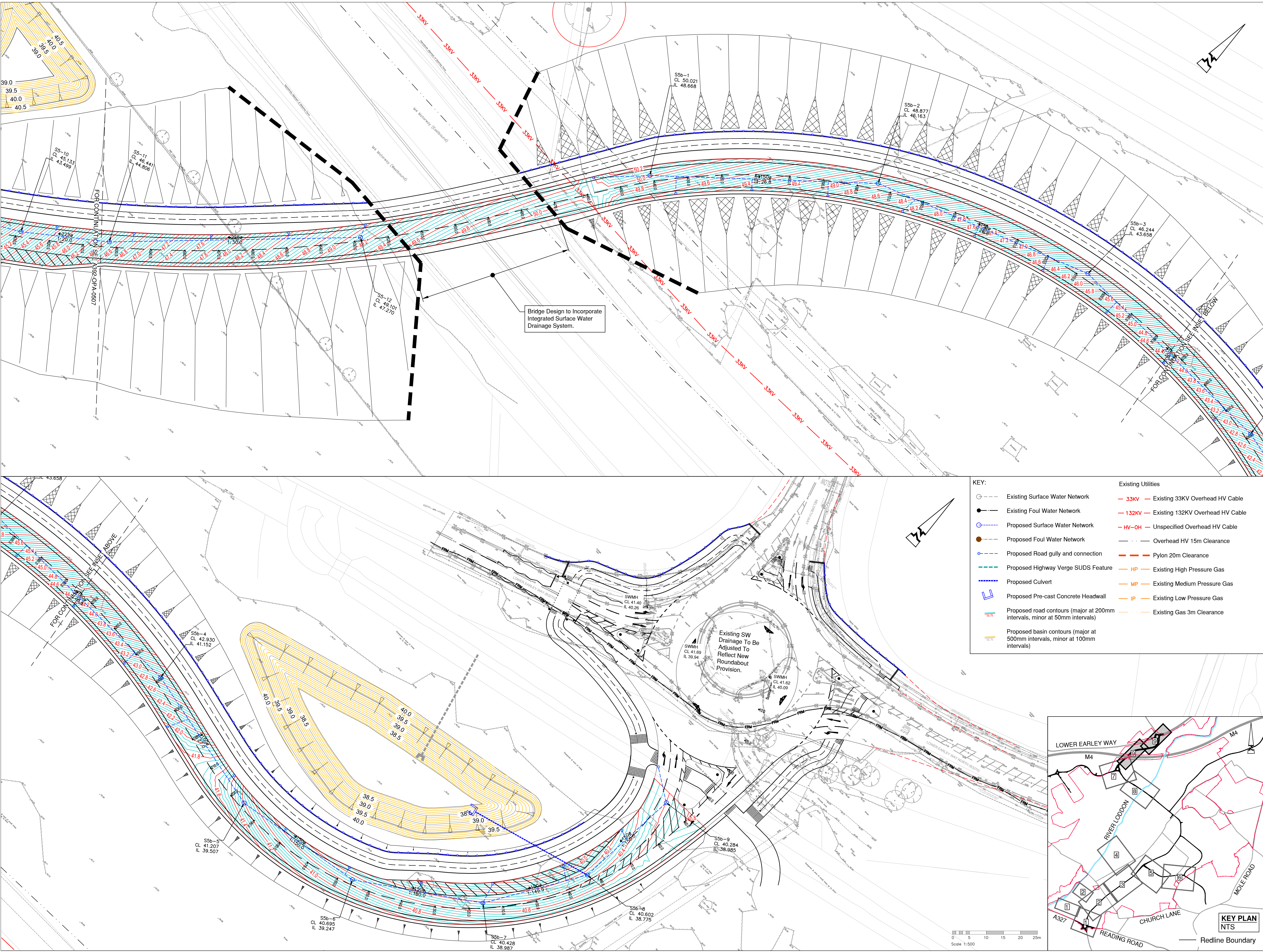
A	07.25	KEY PLAN REDLINE BOUNDARY UPDATED	CS	IPSA
Rev	06.25	FIRST ISSUE	JJS	CS
Rev	Date	Description	Drawn	Checked



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Client	UNIVERSITY OF READING
Project	LODDON GARDEN VILLAGE
Title	DRAINAGE AND LEVELS LAYOUT SHEET 8 OF 9
Status	

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS
Drawing No			Revision
A392-OPA-0508			B



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Project

LODDON GARDEN VILLAGE

Title

DRAINAGE AND LEVELS
LAYOUT
SHEET 9 OF 9

Status

Scale	Date	Drawn	Checked
1:500 @ A1	JUNE 2025	JJS	CS
Drawing No.	A392-OPA-0509		Revision
			B