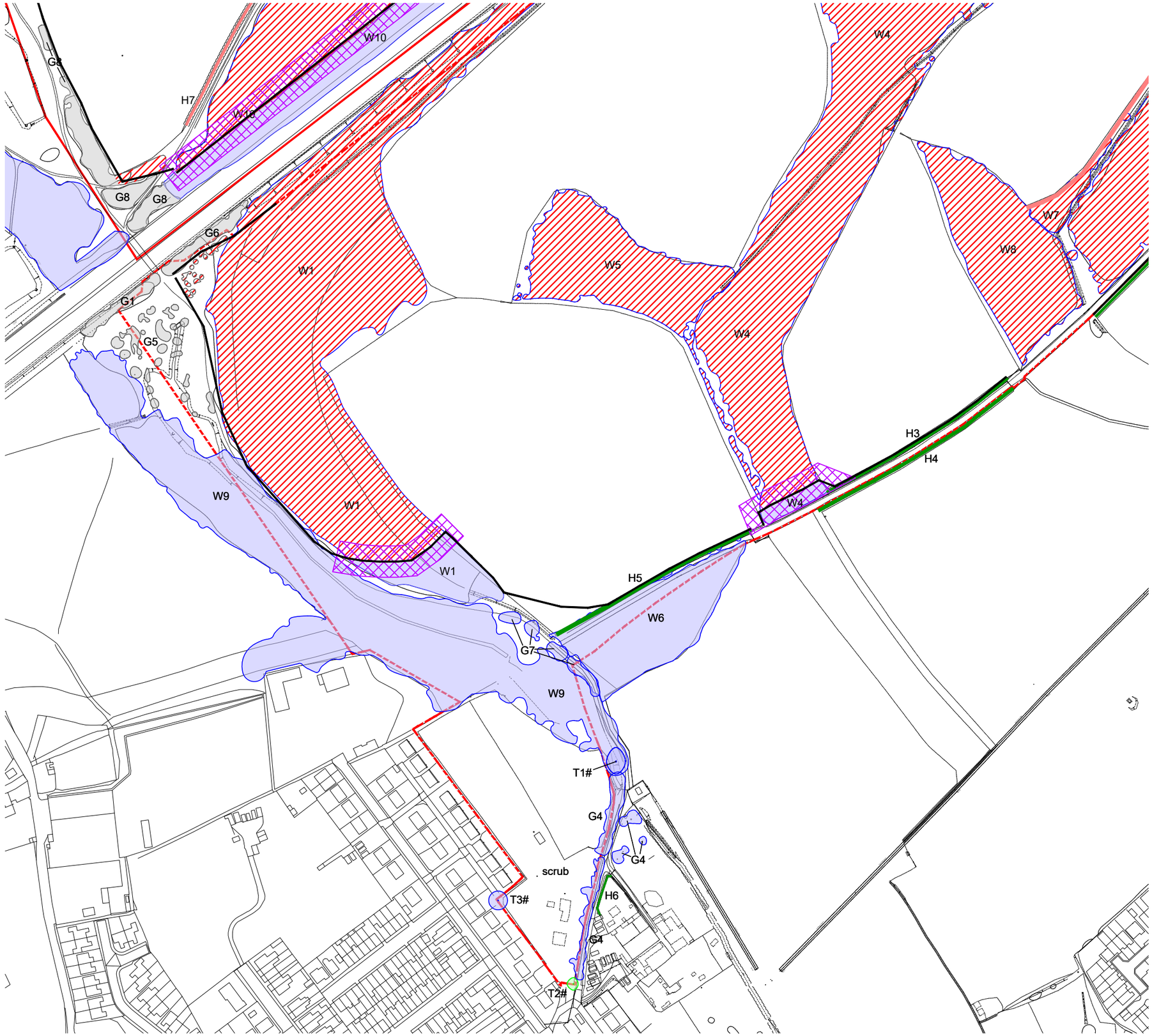
Appendix A - Tree Protection Plans; TEP



KEY

[This drawing must be reproduced in colour]

- T1/G1/W1 — Trees, groups and woodland to retain
- H1 — Hedgerow to retain
- T1/G1/W1 — Trees, groups and woodland to remove
- H1 — Hedgerow to remove
- Boundary
- Ancient Woodland (Short Wood)
- # — Approximate location (Feature not shown on topo)
- Tree Protection Fencing (c. 2,620m) (Must be installed prior to works commencement)
- Arboricultural Method Statement (Felling to stop 10m from final alignment. Detail of tree removal to form new woodland edge to be refined on site under watching brief - refer to Arboricultural Impact Assessment 7890.001 Version 2.0, February 2020 for details)

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Project
Rockingham Arboricultural Impact Assessment

Title
Tree Removal and Protection Plan [AS EXISTING]

Drawing Number
D7890.017

Drawn	Checked	Approved	Scale	Date
TDP	JGS	JGS	1:2,500 @ A3	11/08/2020



KEY

[This drawing must be reproduced in colour]

T1/G1/W1 Trees, groups and woodland to retain

H1 Hedgerow to retain

T1/G1/W1 Trees, groups and woodland to remove

H1 Hedgerow to remove

Boundary

Ancient Woodland (Short Wood)

\# Approximate location
(Feature not shown on topo)

Tree Protection Fencing (c. 2,620m)
(Must be installed prior to works commencement)

Arboricultural Method Statement
(Felling to stop 10m from final alignment. Detail of tree removal to form new woodland edge to be refined on site under watching brief - refer to Arboricultural Impact Assessment 7890.001 Version 2.0, February 2020 for details)

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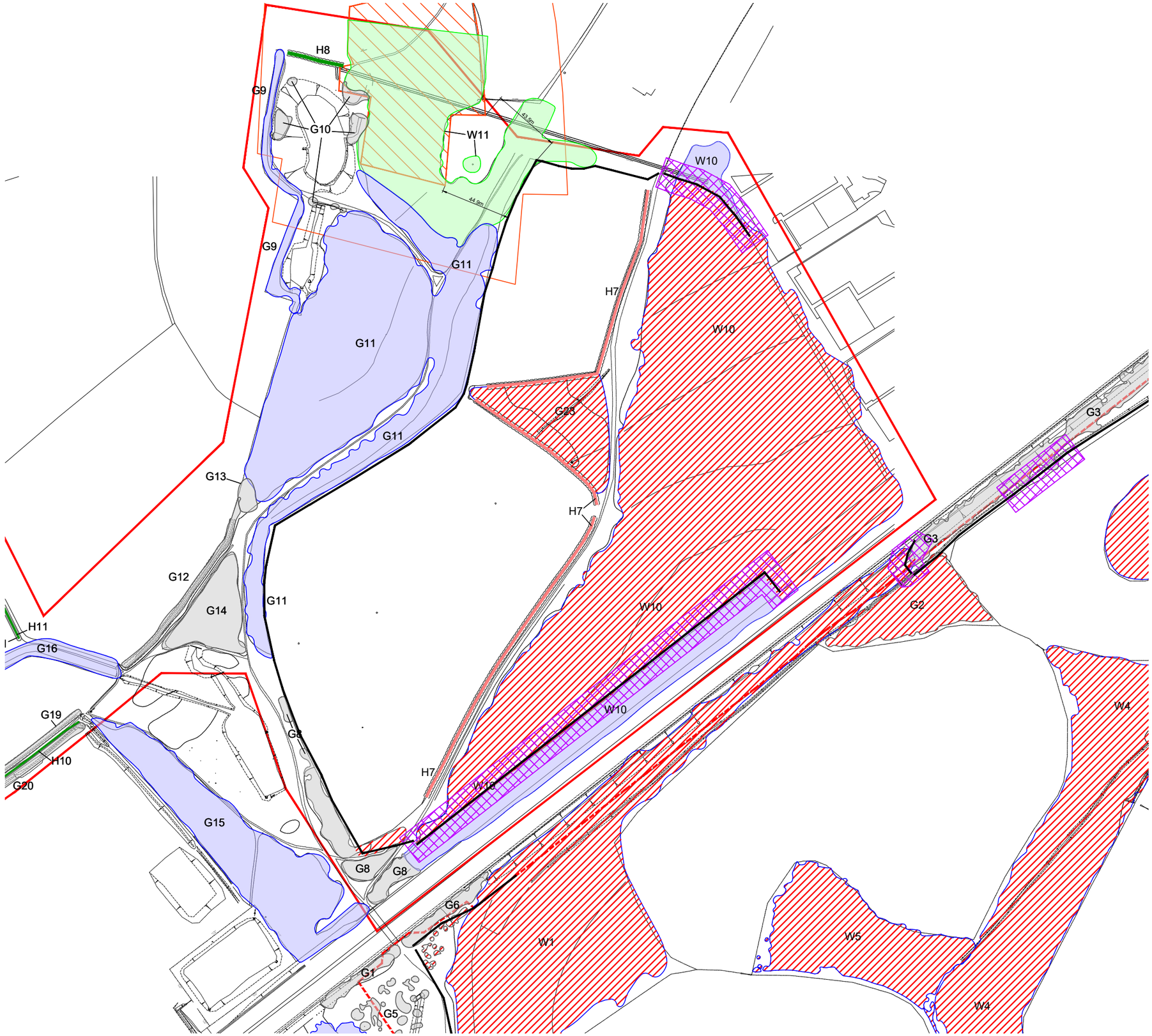
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KEY

[This drawing must be reproduced in colour]

T1/G1/W1 Trees, groups and woodland to retain

H1 Hedgerow to retain

T1/G1/W1 Trees, groups and woodland to remove

H1 Hedgerow to remove

Boundary

Ancient Woodland (Short Wood)

\# Approximate location
(Feature not shown on topo)

Tree Protection Fencing (c. 2,620m)
(Must be installed prior to works commencement)

Arboricultural Method Statement
(Felling to stop 10m from final alignment. Detail of tree removal to form new woodland edge to be refined on site under watching brief - refer to Arboricultural Impact Assessment 7890.001 Version 2.0, February 2020 for details)

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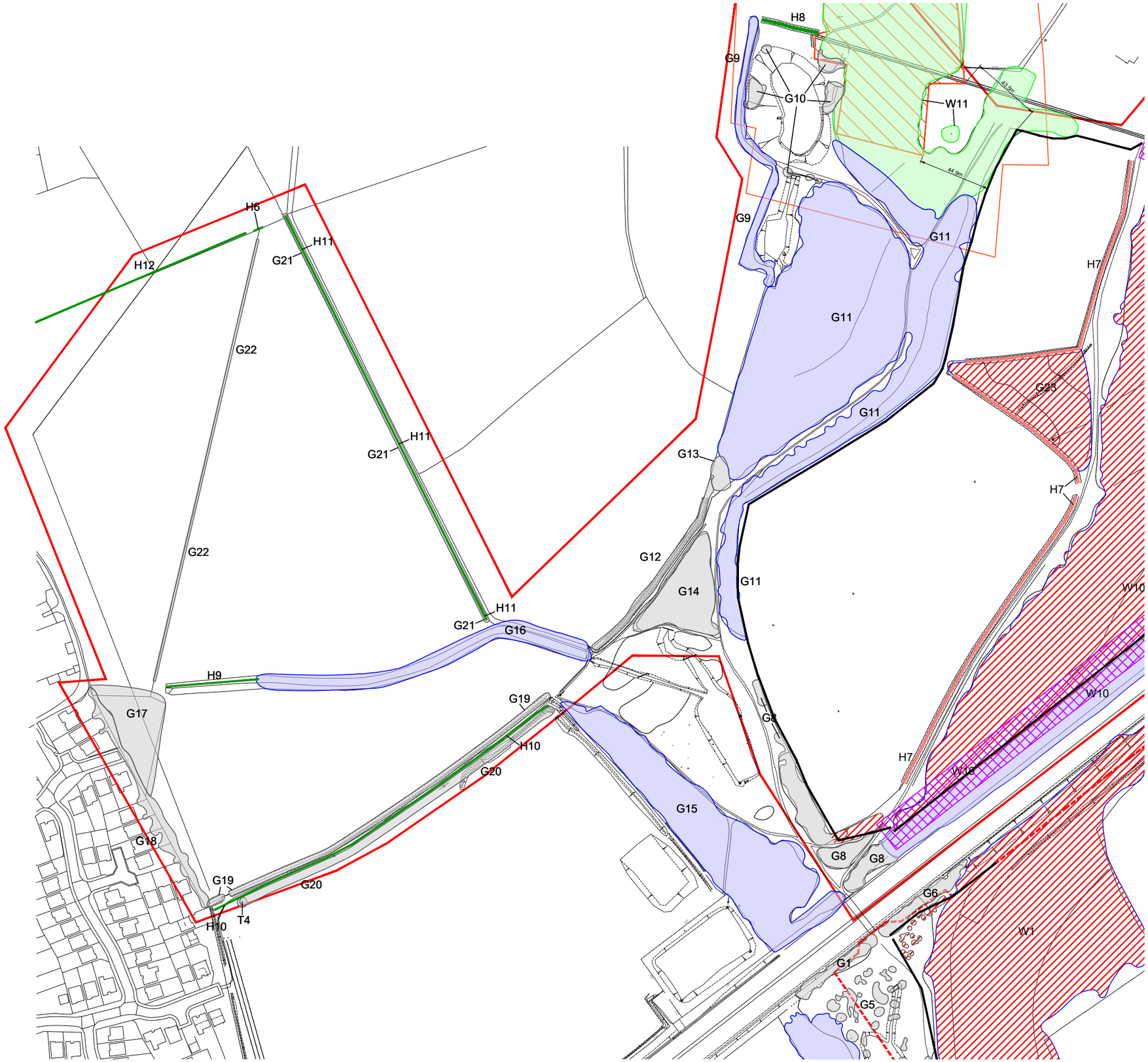
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Project
Rockingham Arboricultural Impact Assessment

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Tree Removal and Protection Plan [AS EXISTING]

Drawing Number
D7890.019

Drawn	Checked	Approved	Scale	Date
TDP	JGS	JGS	1:2,500 @ A3	11/08/2020



KEY

[This drawing must be reproduced in colour]

T1/G1/W1 Trees, groups and woodland to retain

H1 Hedgerow to retain

T1/G1/W1 Trees, groups and woodland to remove

H1 Hedgerow to remove

Boundary

Ancient Woodland (Short Wood)

\# Approximate location
(Feature not shown on topo)

Tree Protection Fencing (c. 2,620m)
(Must be installed prior to works commencement)

Arboricultural Method Statement
(Felling to stop 10m from final alignment. Detail of tree removal to form new woodland edge to be refined on site under watching brief - refer to Arboricultural Impact Assessment 7890.001 Version 2.0, February 2020 for details)

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Project
Rockingham Arboricultural Impact Assessment

Title
Tree Protection Plan [EFFECTS]

Drawing Number
D7890.020

Drawn	Checked	Approved	Scale	Date
TDP	JGS	JGS	1:2,500 @ A3	11/08/2020

Rockingham Arboricultural Impact Assessment

Tree Protection Methodology for Woodland Edge Creation

The formation of new woodland edges in certain areas must be completed under a watching brief before the installation of tree protection fencing. The installation of tree protection fencing must be completed prior to commencement of adjacent construction, including the creation of compounds, access to site by vehicles or plant, delivery of materials, ground investigations or works, or any other construction works. It is therefore important that activities described by this document must be completed as early as possible in the build program .

SEQUENCE OF EVENTS

1. A contractor will be appointed to undertake the tree clearance. For works described by this document, the contractor will be a specialist arboricultural contractor (a tree surgeon).
2. All tree works will be completed according to BS3998:2010 by a suitably qualified, experienced and insured contractor.
3. Prior to the commencement of tree clearance, a topographical surveyor will set out the alignment of Tree Protection Fencing (thick black line). All sections that are highlighted opposite by a pink hatch will be set out with wooden posts and spray marker.
4. It may be cost-effective to also set out all or some other sections of tree protection fencing at the same time.
5. Coordinates for setting out can be provided by TEP. Surveyors can contact tompopplewell@tep.uk.com for a CAD version of this plan.
6. The Arboricultural Contractor will remove trees as shown on Tree Works Plans (Drawing 5, 6, 7 and 8). Trees within 10m of the pegged line (within pink hatched areas opposite) will not be removed.
7. After the primary tree clearance is complete, a site meeting will be arranged by the Site Manager between the appointed Arboricultural Contractor and the Arboricultural Clerk of Works.
8. The Arboricultural Clerk of Works will review the remaining trees along the woodland edge and mark up additional individuals for removal to create a design for the final woodland edge.
9. A proportion of trees within 15m of the new woodland edge will be removed. This will include some trees that are within areas shown opposite as 'retained'. Some smaller trees and shrub may also be retained outside of these areas (i.e. closer to the development).
10. The purpose of tree removal within the leading 15m edge of the remaining woodland will be:
    - 10.1. To reduce density by thinning where appropriate and increase wind penetration into the woodland margin;
    - 10.2. To create a graded profile to the woodland edge with smaller trees on the margin and taller trees set back to improve aerodynamic resilience;
    - 10.3. To remove defective, weak, dead, poorly formed or particularly tall trees that would be liable to increased risk of failure from the woodland edge;
    - 10.4. To introduce scalloping and greater geometric complexity to the woodland edge to improve aerodynamic resilience, the length of the woodland margin, and variety of habitat types.
11. Pruning works to woodland edge trees may also be specified by the Arboricultural Clerk of Works as an alternative/supplement to felling.
12. Trees that have been marked will be removed or pruned by the appointed Arboricultural Contractor in a second 'refining' phase to create the final form of the retained woodland.
13. All tree removal within the second refining phase will be done manually and on foot, using hand tools.
14. Wood chip will not be spread back into the woodland.

Installation of tree protection fencing

15. Following the completion of tree removal works tree protection fencing will set out accurately and installed in accordance with the approved Tree Protection Plans (Drawing 9, 10, 11 and 12).
16. Tree Protection Fencing will be according to the specification TEP.ARB.FEN.001.
17. Signs will be affixed to alternate fencing panels (i.e. approximately one sign per 7m) to explain its purpose. An file for printing can be obtained from tompopplewell@tep.uk.com .
18. The installation and maintenance of tree protection measures according to this Method Statement will be verified by the Arboricultural Clerk of Works.

19. [Stages 8 to 18 may be done in one pass for the whole site, or per area, depending on the build program.]



KEY

[This drawing must be reproduced in colour]

- T1/G1/W1 Retained trees, groups and woodland
- H1 Retained hedgerow
- Root Protection Area (RPA)
- Tree Survey Boundary
- Ancient Woodland (Short Wood)
- Trees to be removed (See Tree Works Plans Drawings 5, 6, 7, and 8)
- Tree Protection Fencing (Must be installed prior to commencement of construction)
- Woodland Edge Creation (Detail of tree removal to form new woodland edge to be refined on site under watching brief)

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Project
Rockingham Arboricultural Impact Assessment

Title
Drawing 13: Tree Protection Methodology - Woodland Edge Creation

Drawing Number
D7890.015

Drawn	Checked	Approved	Scale	Date
TDP	JGS	JGS	1:2,000 @ A3	11/02/2020

Rockingham Arboricultural Impact Assessment

Tree Protection Methodology for Pond Creation

The formation of new ponds adjacent to retained woodland in two locations must be completed according to this method statement and under a watching brief. This will minimise harm to the remaining woodland and avoid adverse effects (loss or deterioration) to an ancient woodland (Short Wood), which is approximately 40m from the site.

SEQUENCE OF EVENTS

1. Tree removal will be completed in accordance with the approved Tree Works Plans D7890.005-008 (Drawing 5, 6, 7, and 8).
2. Additional tree removal and pruning will be completed along new woodland edges in accordance with D7890.015 Tree Protection Methodology - Woodland Edge Creation (Drawing 13).

Standard tree protection (black line)

3. Tree protection fencing will be installed at the alignment shown opposite (see also Tree Protection Plans D7890.009-012 (Drawings 9, 10, 11 and 12).
4. Tree protection fencing will be according to the specification shown on TEP.ARB.FEN.001.

Additional tree protection (green and purple line)

5. Within 50m of the ancient woodland (Short Wood), an upgraded specification will be used. This section is highlighted opposite.
6. The upgraded fencing specification will comprise:
   - 6.1. 2.4m 'in-ground' hoarding (Heras Readyhoard or equivalent);
   - 6.1. Scaffold uprights driven vertically into the ground;
   - 6.2. Hoarding to scaffold couplers (Heras Scaff to Hoard HDK couplers or equivalent);
   - 6.3. Ground skirts to prevent any migration of material under the hoarding.
7. Immediately adjacent to the upgraded fencing, temporary ground protection boards will be laid comprising:
   - 7.1. Rigid interlocking proprietary ground protection boards (Ground Guards XtremeMats or equivalent);
   - 7.2. Minimum 2m width, butted up to the tree protection fencing;
   - 7.3. Boards bedded onto woodchip where necessary to create a stable base and even out abrupt undulations.
13. The correct alignment and specification of tree protection measures will be verified by the Arboricultural Clerk of Works prior to commencement of construction.

Start of construction

14. Excavation of the ponds will proceed in accordance with the approved design. During works, no plant or vehicles will enter the tree protection fence or ground protection areas.
15. Excavation will commence adjacent to the woodland and progress methodically away from the woodland to the east and south.
16. Excavated material will be stored at least 10m away from any tree protection fencing to avoid harm by run-off or soil compaction.
8. During construction, the condition of the hoarding, fencing and ground protection periodically checked and maintained. Any material accumulating on the ground protection will be scraped back and removed to maintain a clean and tidy strip inside the fence line.

Removal of tree protection and landscaping

9. After earth works, pond filling and all other construction in the vicinity is complete, tree protection fencing may be removed. This will be done using the ground protection as a trackway. No plant or vehicles will transit across unprotected ground.
10. Following removal of the tree protection fencing, ground protection boards will be removed. Boards will be lifted from one end, working sequentially back along the track to avoid transiting on bare ground.
11. Following removal of tree protection, landscaping between the pond and the trees will be completed in accordance with approved plans. The ground protection trackway may be retained for access to this area and removed following landscaping if desirable.
12. All landscaping within 50m of the ancient woodland (Short Wood) will comprise native species of local provenance.
13. The condition of retained trees and woodland will be inspected and verified on completion by the Arboricultural Clerk of Works.

14. Advice on the suitability and equivalence of alternative products can be sought by contacting TEP at tompopplewell@tep.uk.com .



KEY

[This drawing must be reproduced in colour]

- T1/G1/W1 Retained trees, groups and woodland
- H1 Retained hedgerow
- Root Protection Area (RPA)
- Tree Survey Boundary
- Ancient Woodland (Short Wood)
- Ancient Woodland 50m boundary offset
- Tree Protection Fencing (Must be installed prior to commencement of construction)
- Upgraded Protection Fencing and Ground Protection (Must be installed prior to commencement of construction)
- Pond Creation (In accordance with this document)

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Project: Rockingham Arboricultural Impact Assessment

Title: Drawing 14: Tree Protection Methodology - Pond Creation

Drawing Number: D7890.016

Drawn	Checked	Approved	Scale	Date
TDP	JGS	JGS	1:1,500 @ A3	11/02/2020