



Location:
Boldon Golf Club

Report Type:
**Arboricultural Impact Assessment
Arboricultural Method Statement
Tree Protection Plan**

Ref:
ARB/AE/3346

Date:
February 2025

Wrens Nest, Underhill, Glaisdale, North Yorkshire, YO21 2PF
Tel – 01947 897001 Email: enquiries@elliottconsultancy.com
www.elliottconsultancy.com

Company Registration No: 5515572 VAT No: 89226571

Contents

1	Introduction
2	Site Information
3	Design Proposals and Arboricultural Impact Assessment
4	Arboricultural Method Statement - Pre-Development Works
5	Arboricultural Method Statement - Tree protection measures during construction
6	Arboricultural Method Statement - Post-Construction Considerations

Appendices

1	Tree Data
2	Arboricultural Tasks Sequence Table
3	Tree Protection Fencing
4	Construction Exclusion Zone Notice
5	Tree Stem Protection – Specification
6	Removing Hard-surfacing Within Root Protection Areas
7	Ground Protection Specifications
8	Tree Constraints Plan
9	Tree Impact Plan
10	Tree Protection Plan

1 Introduction

- 1.1 This report has been prepared by Andrew Elliott of Elliott Consultancy Ltd on behalf of the applicant.
- 1.2 Elliott Consultancy Ltd were commissioned to visit the Site to inspect the trees and to produce arboricultural reports in accordance with British Standard 5837:2012 'Trees in Relation to Design, Demolition & Construction'. Initial inspection of trees was undertaken during March 2025 following which a tree survey and constraints report was produced to guide design.
- 1.3 **Scope of the report:**
- This report provides further arboricultural information and advice in relation to the proposed re-development of the site - as shown within Appendix 9.
 - Section 3 provides a summary of the design proposals and their expected impact on the current tree population.
 - Sections 4-6 provides a method statement that details all measures recommended for tree protection including any special construction measures to be utilised. It should be used to guide the construction process in order to minimise potential damage to retained trees.
 - Within the Arboricultural Tasks Sequence Table (Appendix 2), is a timescale for implementation of these tree works and protective measures in reference to the development period.
- 1.4 Prior to Site works commencing, this method statement needs to be passed to the site manager / contractor and used as reference during construction.

2 Site Information

- 1.4 The survey area included trees around the eastern section of carpark at the golf club, including those around the northern entrance and the current clubhouse. Figure 1 shows the general project area. Trees in adjacent property and close proximity to the project area have also been surveyed to ensure all nearby trees are considered during design phases.

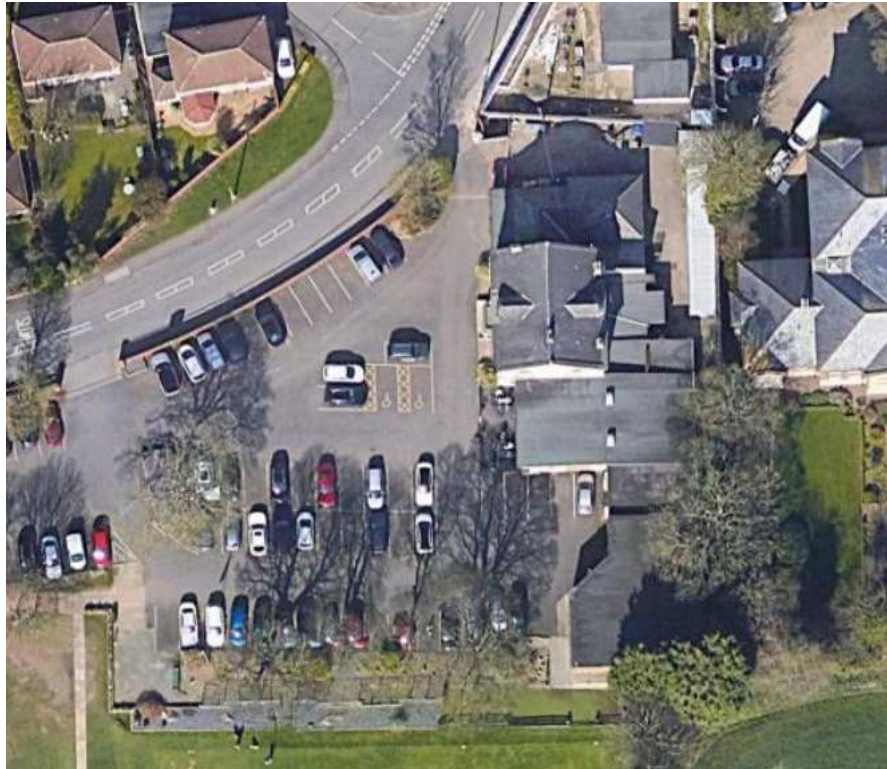


Figure 1: Project area.

3 Design Proposals and Arboricultural Impact Assessment

- 3.1 This section concentrates on the proposals and how they relate to the trees on site at present. Any tree and design conflicts are highlighted, and possible remedial action suggested if appropriate.

3.2 **Potential Conflict 1: Loss of trees due to the construction of the new layout.**

Tree 7 requires removal to allow construction and provide reasonable outdoor garden space for Unit 6. Two trees at the western end of Group 2 will be removed plus retained trees in Group 1 will require pruning back to allow a 2m space between the construction zone and foliage to allow construction and scaffold etc.

Mitigation / Countermeasure: Tree 7 is a self-seeded semi-mature Sycamore in reasonable condition that was classified as a Category B tree of moderate quality. However, it is noted that the tree is now becoming increasingly suppressed by the larger and more dominant Trees' 6 & 8, and that its visibility and value as an amenity feature is somewhat limited. Tree Group 1 is a low-quality group of Leyland Cypress planted to screen the building from the golf course and the cutting back and removal of the western end of the group to allow access is not considered a significant arboricultural impact. Tree planting on the site can be undertaken to compensate for this loss of canopy cover.

3.3 **Potential Conflict 2: Damage to retained trees during construction.**

Trees may be damaged during construction due to a variety of reasons during a development process.

Mitigation / Countermeasure: As most of the trees are located in proximity to buildings and hard-surfacing already, the use of standard tree protection fencing and construction exclusion zones will not always be possible during the construction period. Where fencing can be utilised it is shown on Appendix 10, but where not possible due to the site restrictions, ground protection boards must be used to prevent ground compaction and stem protection will be installed to prevent any potential impact damage to trees – a specifications for each is provided at Appendices 5 & 7.

3 Design Proposals and Arboricultural Impact Assessment

3.4 Potential Conflict 3: Damage to trees during excavation and re-surfacing works.

During the removal and replacement of existing hard-surfacing, creation of new surfacing, or installation of utilities, roots can be damaged.

Mitigation / Countermeasure: It is not expected that any of the new surfacing for parking will necessitate excavation beyond the existing surfacing and compacted sub-base and that therefore no significant impact would be expected. Guidelines are provided at Appendix 6 to assist in the removal of surfacing around tree bases which should be followed. If any excavation is required to a depth beyond the current compacted sub-base, then ground protection measures will be followed to prevent any further damage or disturbance being caused – see Appendix 7. Any works to new or existing utilities must be undertaken with regard for the retained tree cover and be in accordance with NJUG (National Joint Utility Groups) guidelines. Where a new section of hard-surfacing is proposed within the root protection area (RPA) of Tree 5, the surfacing is proposed to be constructed without excavation and be permeable in nature. Full engineering design for this element (see Appendix 10 for location) is not yet available, but it is expected that this section can be constructed above the existing ground level and include a gap or floating buffer between the ground and new surface which will also incorporate a degree of permeability.

4 Pre-Development and Site Preparation Works

- 4.1 Refer to Appendix 1 for stage specific tasks.
- 4.2 Further to any site works commencing, the following arboricultural specific actions need to be implemented: An arboricultural contractor should be sought and the tree works recommended within Appendix 2 undertaken.
- 4.3 Once the aforementioned tasks have been completed and prior to any other site work, the temporary tree protection fencing, tree stem protection, and ground protection will be installed in order to protect the trees from damage (see Appendices 3-7 for specifications and Appendix 10 for locations); these must remain in situ during the entire construction process.
- 4.4 Construction material storage and site offices must be confined to an area identified away from trees and outside of all root protection areas and agreed with the local authority as acceptable.
- 4.5 At the beginning of the construction phase, the site manager will appoint a delegated representative who shall be responsible for continued checking of protective guards to ensure they remain in place.

5 Tree protection measures during construction

- 5.1 Refer to Appendix 1 for stage specific tasks.
- 5.2 All ground levels where trees are located should be maintained. Changes to soil levels adjacent to tree stems can severely affect the trees structural integrity and its ability to gain moisture and nutrients from the surrounding soil. Unavoidable level changes that may affect retained trees, and not already accounted for within this method statement, should be assessed by a qualified arboriculturalist so that any remedial works can be undertaken.
- 5.3 Building material storage and operations that can contaminate soil, such as cement mixing, must be confined to areas outside the tree protection areas.
- 5.4 Fires should not be lit on Site.
- 5.5 The trees should not be used to attach notices, cables or other services.
- 5.6 Where plant or other boomed vehicles are used on site care must be taken to ensure that no contact is made with any retained trees, and that adequate clearances are checked prior to any lifting operations near trees cover.
- 5.7 No new utilities should be located within the root protection areas of retained trees. Where installation or alteration to existing underground services has been agreed near or adjacent to trees, all works shall conform to the requirements of National Joint Utilities Group publication Volume 4 (November 2007).

6 Post-Construction Considerations

- 6.1 Refer to Appendix 1 for stage specific tasks.
- 6.2 Only once all construction works have been completed can the protective measures be removed.
- 6.3 No significant ground excavation or mechanised ground treatments / rotavation etc will be undertaken within the protected areas, with all landscaping being undertaken by hand or with hand operated machinery.

Tree Survey Data

No.	Species	Age	DBH	Stems	Height	Crown Spread				CH	EstD	General Observations	EstCont	BS Cat	Recommendation
						N	S	E	W						
1	Sycamore	SM	42	1	9	3	5	3	3	2	N	Located in raised bed. Ivy growth on stem limited visibility.	40+	B1	No work required
2	Sycamore	M	95	1	20	6	6	7	5	5	N		40+	A1	No work required
3	Whitebeam spp	M	75	1	15	5	5	5	4	4	N	x3 co-dominant stems with acute angled attachment at 1.5m.	20+	B1	No work required
4	Sycamore	EM	57	1	20	6	5	4	5	5	N		40+	B1	No work required
5	Sycamore	M	91	1	20	8	8	7	6	4	N		40+	A1	No work required
6	Sycamore	M	90	1	20	8	8	7	7	5	Y	Access restricted - in fenced-off area. Ivy growth on stem limited visibility.	40+	A1	No work required
7	Sycamore	SM	30	1	12	4	2	3	4	5	Y	Access restricted - in fenced-off area. Ivy growth on stem limited visibility.	40+	B1	Remove to allow construction. Treat stum to prevent regrowth.
8	Sycamore	M	90	1	20	7	7	6	6	5	Y	Off-site	40+	A1	No work required

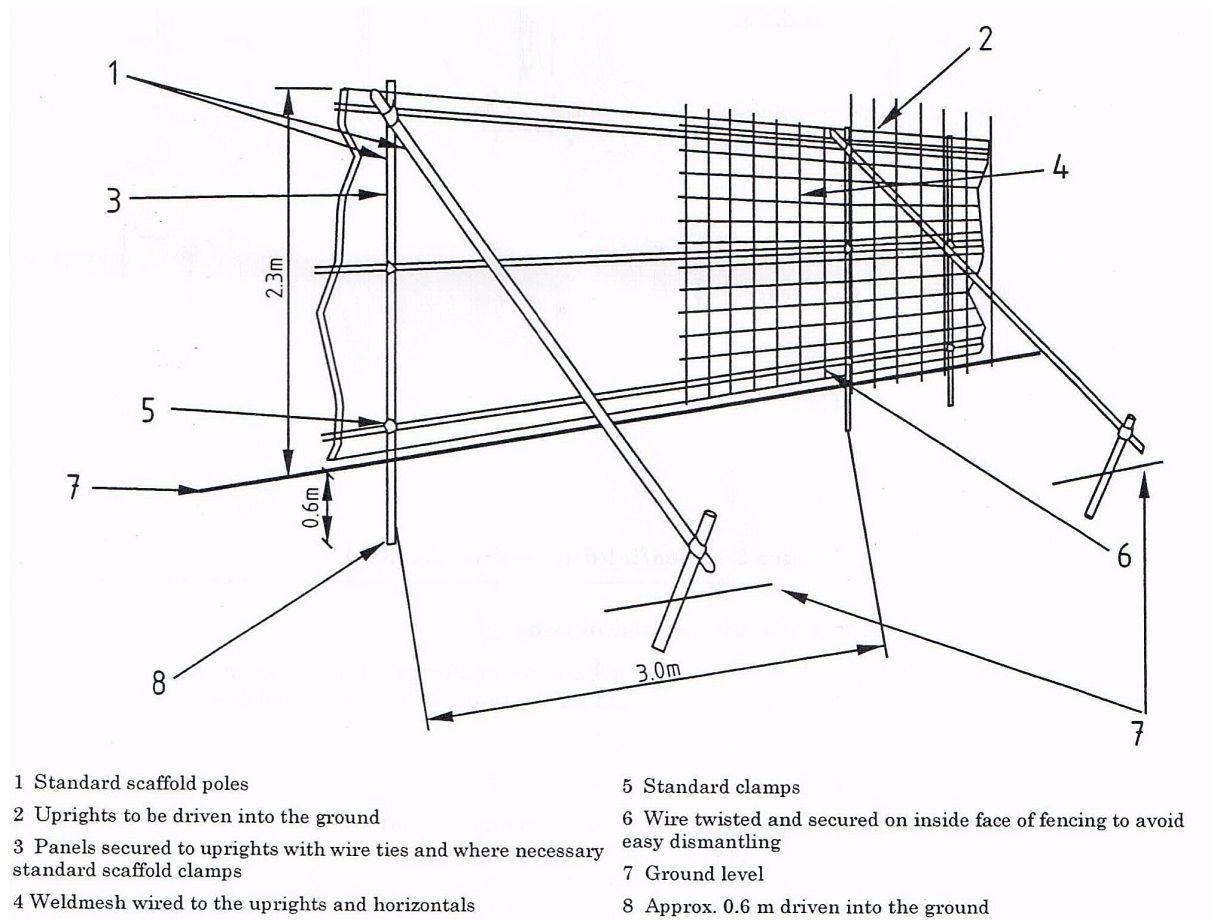
Group Data

Group Number	Dominant Species	Lesser Species	DBH	Average Height	Age	Average Spread	Condition/Comments	Recommendations	EstCont	BS Cat
1	Leyland Cypress	Sycamore	35	12	SM	2	x9 Cypress and single small self-seeded Sycamore. Cypress planted as hedge/screen but not managed - typically poor crown-form with weak branch unions etc. Low quality.	Remove x2 stems from western end and cut back overhanging foliage to provide 2m clearance to construction zone	20+	C2
2	Sycamore		35	12	SM	4	x3 trees at rear of tee.	No work required	40+	B2

Appendix 2: Arboricultural Task Sequence

Tree or Group Number	Pre-Demolition & Construction Stage	Construction Stage	Post Construction Stage
Tree 7.	Remove and treat stump to prevent regrowth.		
Tree Group 1.	Remove two trees from western end. Cut back overhanging foliage to allow 2m clearance to the building line.		
All trees.	Adhere to Section 4. Install tree fencing, tree stem protection guards, and ground protection boards as per Appendices. Site manager & to inspect and sign off guard provision.	Adhere to specification within Section 5. Monitor integrity of protection measures.	Adhere to specification within Section 6. Remove tree protection measures.

Appendix 3 : Protective Fencing Specification





Appendix 5: Tree Stem Protection - specification :



Trunk Protecta® waterproof, high-vis canvas tree guard

Product name: Trunk Protecta®

Cross-section dimensions (mm): Single unit for trees with 30-60cm diameter;
multiple units for 200cm+

Aboveground height (mm): 1200 or 1800mm

CONTACT

Green Grid Systems

The Nursery

Littleton Lane

Winchester

SO21 2LS

United Kingdom

Call: 01962 433460

Email: sales@greengridsystems.com

<https://greengridsystems.com/products/trunk-protecta>

DESCRIPTION

Trunk Protecta® provides an effective, easy-to-install solution for protecting a tree trunk from abrasion and accidental damage from vehicles and construction traffic.

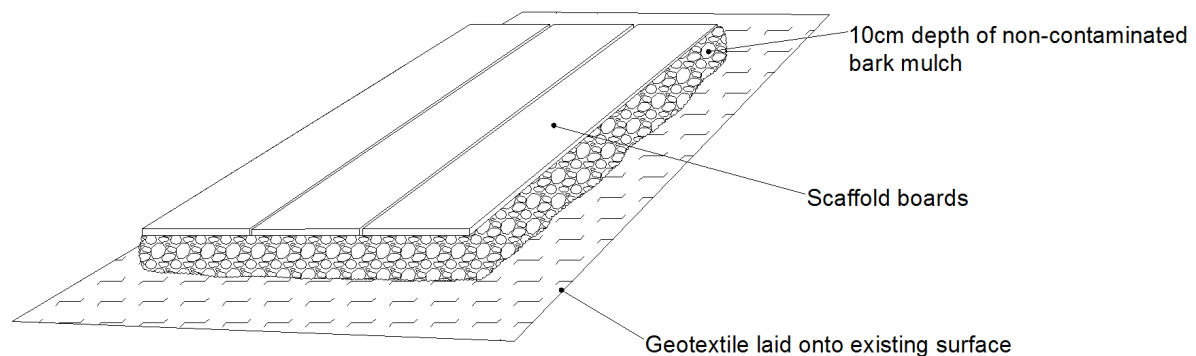
Trunk wounds that penetrate the bark will damage the cambium layer, a thin layer of vascular tissue, which is vital for the movement of water and nutrients around the tree. Standard level of protection - 1.2m; a higher level can be achieved using the 1.8m variant. Acts as an abrasion and impact-resistant protective barrier over tree bark, stopping wounds and tear injuries that could allow disease and decay to enter the tree.

Appendix 6: Removing Hard Surfaces & Other Excavations within Root Protection Areas

- All excavations within root protection areas must only be undertaken using hand tools or pedestrian operated machinery.
- The required excavations must be kept to a minimum to avoid unnecessary root damage and ideally undertaken during the presence of an arboriculturalist.
- Great care must be taken not to damage the bark of roots that can be retained in order to avoid wounds which could be exploited by pathogens.
- Exposed roots that can be retained must be wrapped with dry sacking if to be left for extended periods e.g. overnight. Sacking must be removed prior to backfilling.
- All roots >25mm should be preserved and worked around. Where this is not possible, severance should only take place after consultation with the tree officer / appointed arboriculturalist. Roots must be cut using a sharp knife leaving as small a wound and as clean a cut as possible.
- Great care must be taken not to allow contaminants, such as oils, into the excavation.

Appendix 7: Access within Root Protection Areas

Ground Protection to Enable Access for Pedestrians within Root Protection Areas



For pedestrian operated machinery with a maximum gross weight of 2 tonnes, 15cm of bark mulch on top of a geotextile topped with interlocking ground reinforcement boards would be suitable. For vehicles exceeding 2 tonnes gross weight, suitable ground protection to enable access within a root protection area would need to be designed by an engineer in conjunction with an arboriculturalist. Scaffold can be placed over this ground protection with the lowest level being placed above the ground protection boards. Examples of interlocking ground protection mats such as the *Trakmat* of *Euromat* would be the recommended final layer.



Figure: Trakmat

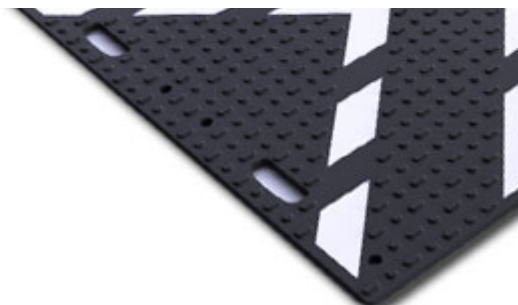
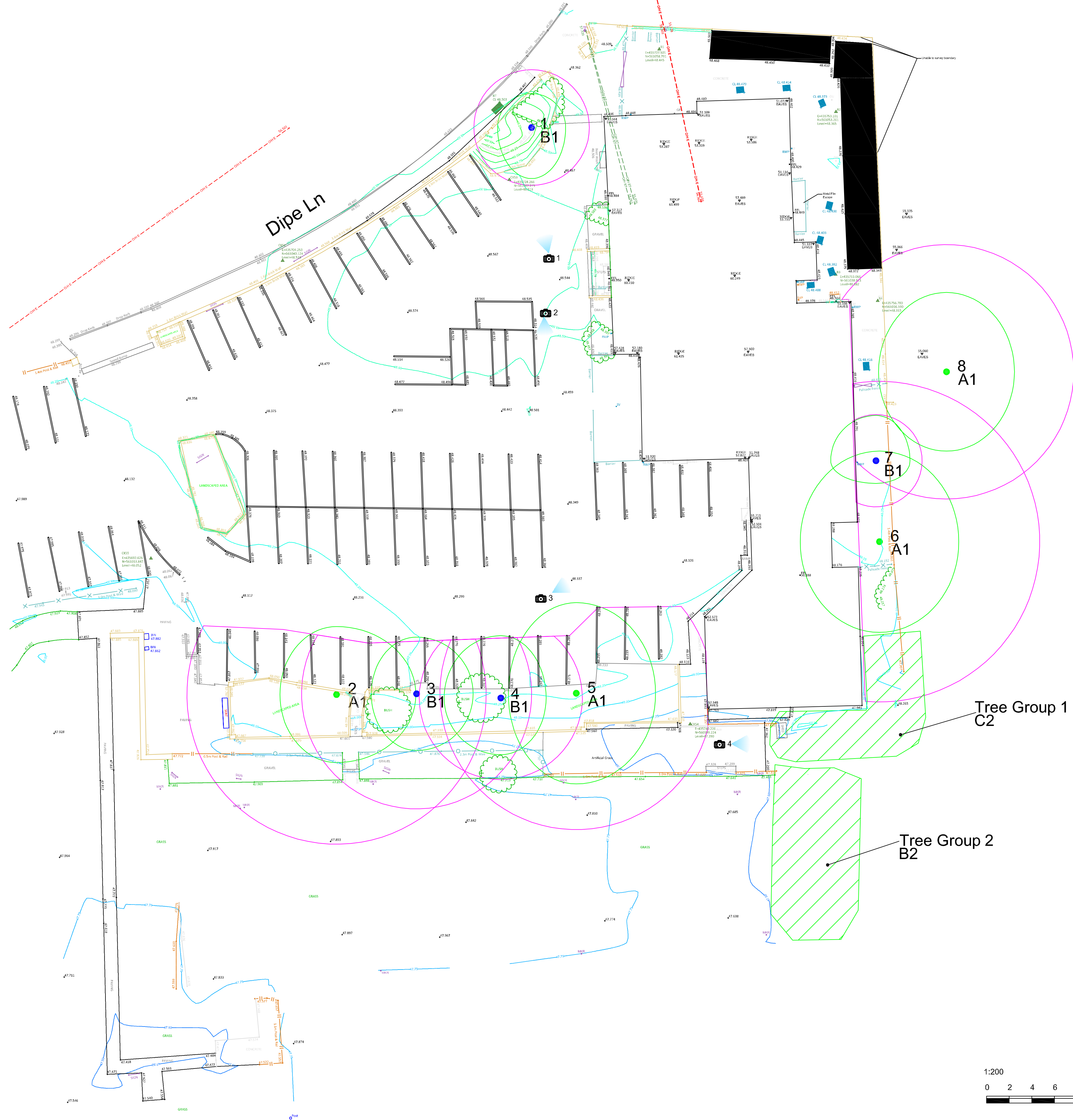
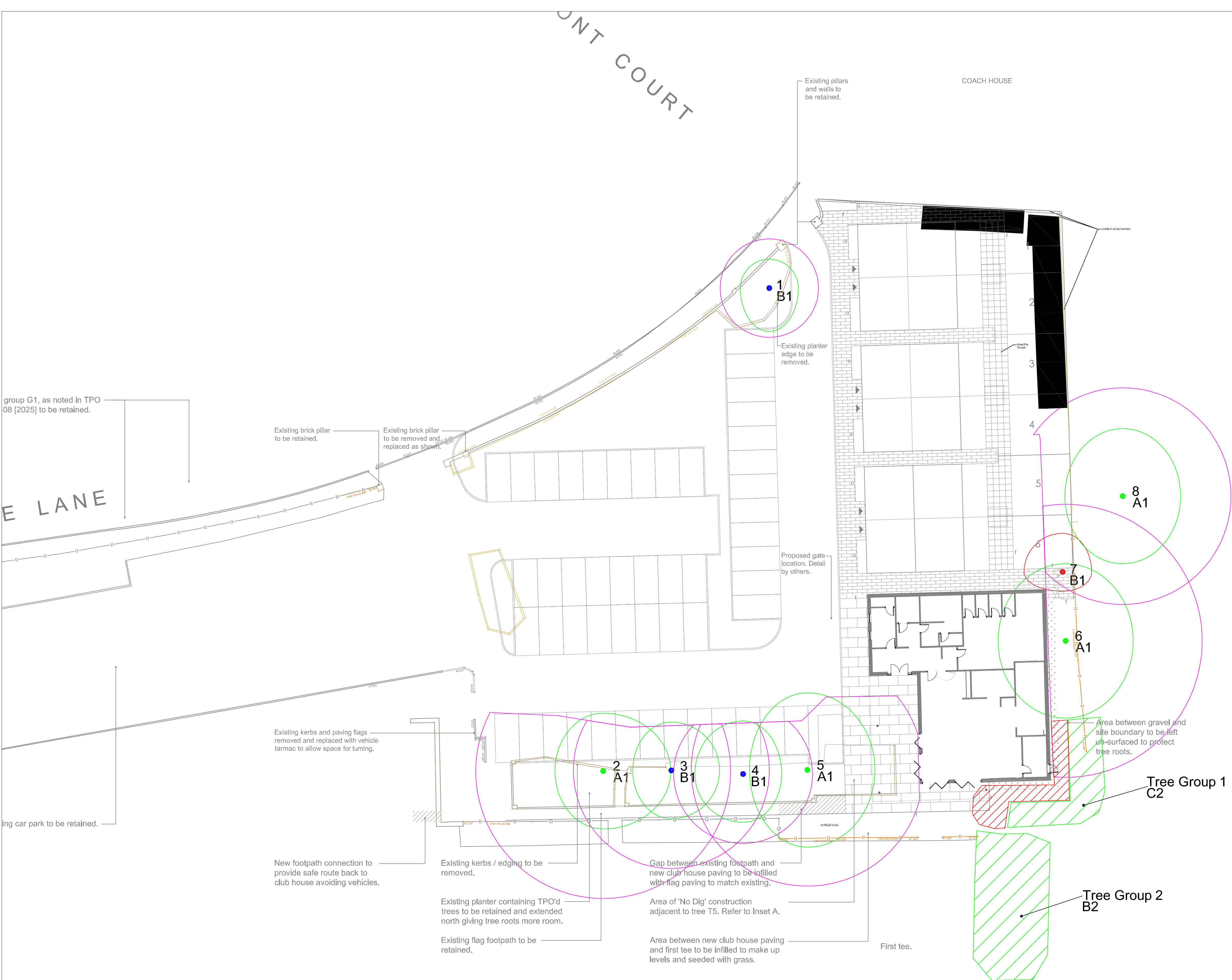
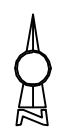


Figure: Euromat



- Tree Position Showing Crown Extents and BS5837 Category A
- Tree Position Showing Crown Extents and BS5837 Category B
- Root Protection Area - to remain free from disturbance (merged where over-lapping)
- Group of Trees
- 1/G1/H1 Tree/Group/Hedgerow Number
- A1/B1/C1/U BS5837 Retention Category
- Photo Number, Position and Aspect



Tree Position Showing Crown Extents and BS5837 Category A

Tree Position Showing Crown Extents and BS5837 Category B

Root Protection Area - to remain free from disturbance

Group of Trees

1/G1/H1 Tree/Group/Hedgerow Number

A1/B1/
C1/U BS5837 Retention Category

Tree to be removed

Group of Trees to be removed

APPENDIX 9

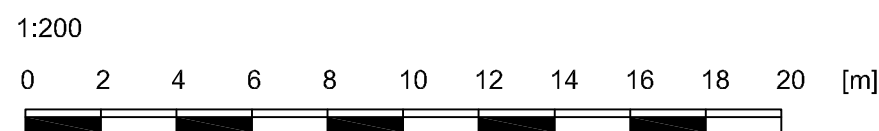
Drawing Title: Tree Impact Plan

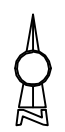
Project: Boldon Golf Club

Drawing Number: ARB/AE/3346/TIP

Date: February 2025

Scale: 1:200 @ A1





Tree Position Showing Crown Extents and
BS5837 Category A

Tree Position Showing Crown Extents and
BS5837 Category B

Group of Trees

1/G1/H1 Tree/Group/Hedgerow Number

A1/B1/
C1/U BS5837 Retention Category

Tree Protection Fence

Construction Exclusion Zone

Ground Protection Boards

'No Dig' Construction

Tree Stem Protection

APPENDIX 10

Drawing Title: Tree Protection Plan

Project: Boldon Golf Club

Drawing Number: ARB/AE/3346/TpP

Date: February 2025

Scale: 1:200 @ A1